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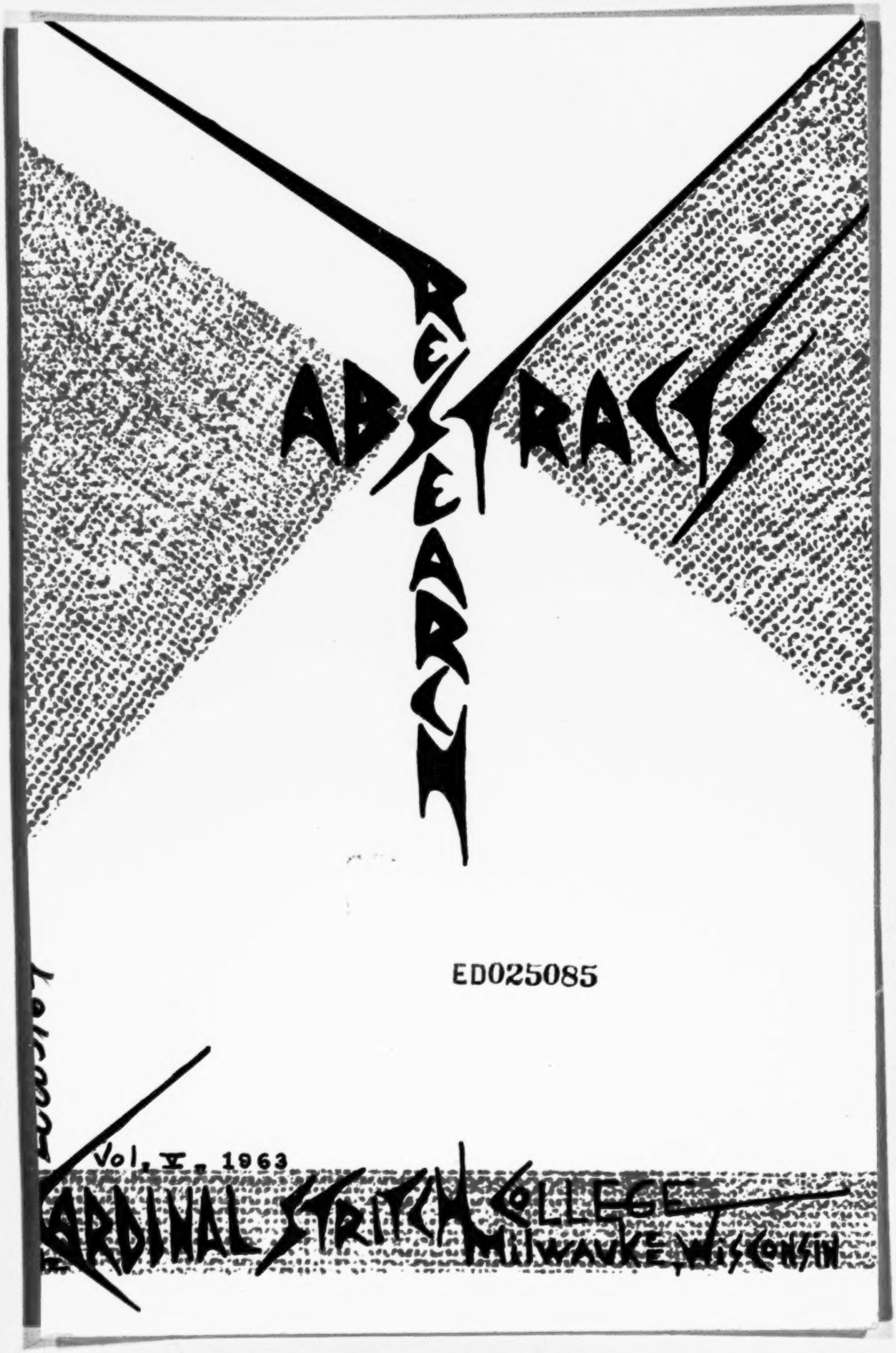

RESEARCH ABSTRACTS

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Vol. V, 1963

CARDINAL STRITCH COLLEGE
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RESEARCH
ABSTRACTS

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The Cardinal Stritch College
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Volume V
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FOREWORD

The Cardinal Stritch College—a liberal arts college conducted by the Sisters of St. Francis of Assisi—grants the Master of Arts degree in two fields of education: one preparing the Reading Specialist, and the other, the Teacher of the Mentally Handicapped.

Fifty degrees were granted in 1963. The abstracts of studies completed in fulfillment of requirements for those degrees are presented in this fifth volume of RESEARCH ABSTRACTS. The original reports are available from The Cardinal Stritch College Library through inter-library loan service. Titles are also listed in Master's Theses in Education, Research Publications of Iowa State Teachers College, Cedar Falls, Iowa.

Sister Marie Colette, O.S.F., Ph.D.
Editor

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THE EFFECT OF INTENSIVE REMEDIAL READING AND SPELLING INSTRUCTION ON THE ACHIEVEMENT AND PERSONALITY REHABILITATION OF DELINQUENT GIRLS

Sister Mary of St. Joachim Baeri, R.G.S.

PROBLEM. The purpose of this dissertation was to show the effect of intensive remedial reading and spelling instruction on the academic achievement and personality rehabilitation of delinquent girls. The subjects were educationally retarded pupils in grades seven through eleven.

Specifically, answers were sought to the following questions:

1. Will delinquent retarded readers improve scholastically when given intensive remedial instruction in reading and spelling?

2. Will improvement in reading and spelling contribute toward personality change?

PROCEDURE. The subjects for the experiment consisted of 25 girls out of a population of 75 juvenile delinquents who resided at Mount St. Mary School, Springfield, Massachusetts, and who were enrolled in the regular seventh, eighth, ninth, tenth, and eleventh grades. To obtain the potential and achievement of each girl, and for purposes of screening, the Wechsler Intelligence Scale for Children, or the Wechsler-Bellevue Intelligence Scale, the Gates Reading Survey, Form I, and the Wide Range Achievement Test in reading and spelling were administered to the entire population. Five of the more educationally retarded girls from each of the five above-mentioned levels were selected for the intensive remedial instruction of this study.

In the seventh and eighth grades, whose members were combined into one class, intensive remedial instruction was given to the girls in the experimental groups four days weekly. The first fifteen minutes of these periods, as well as the entire period on Friday, were devoted to whole-class activities. In the ninth, tenth, and eleventh grades, intensive remedial instruction was given to the girls in the experimental groups three days weekly. Tenth and eleventh-grade girls not in experimental groups were self-directed while the writer taught the experimental groups. Seventh, eighth, and ninth-grade girls not in experimental groups worked under the direction of a pupil-teacher from among their number, with leadership rotating daily. Editor's note: The thesis lists the reading and spelling materials used and describes in detail the specific skills taught and practiced in each of the classes.

At the close of the five-months' experimental period an alternate form of the Gates Reading Survey and the reading and spelling sections of the Wide Range Achievement Test were administered. A questionnaire constructed by the writer was distributed to three persons: the Guidance Directress, a faculty member, and a member of the referral agency or psychological staff which contacted a girl before and during the experiment. The purpose of the questionnaire was to obtain observations regarding scholastic and behavioral progress of each girl in the experimental groups.

FINDINGS.

1. Although the girls were educationally retarded and delinquent, they could be considered a representative sampling of a normally distributed population in regard to intelligence quotient.

2. The experimental group made a gain on the Gates speed test which was significant at the .05 level of confidence. Gain in reading vocabulary and comprehension was not significant. This result may be explained by the fact that the Gates Reading Survey penalizes for errors in the latter two sections, but not in the speed test.

3. Gains in reading and spelling on the Wide Range Achievement Test were significant at the .001 level of confidence.

4. Since the sample consisted of girls who were both emotionally disturbed and educationally retarded, the above results may imply that the sample was more receptive and responsive to standardized tests of a less formal appearance than to the more formal-appearing test.

5. Responses to the questionnaire seemed to indicate that there had been great need for remedial reading and spelling instruction for the pupils; that the girls progressed not only scholastically, but that intensive instruction in reading and spelling contributed toward personality rehabilitation for most cases.

SUMMARY AND CONCLUSIONS. The findings of this study seem to justify the following conclusions:

1. Delinquent girls who are retarded readers will improve in word recognition, spelling, and rate of reading as a result of intensive remedial instruction.

2. Intensive remedial instruction and subsequent improvement in reading and spelling effected desirable changes in attitudes on the part of delinquent girls.

A DIAGNOSTIC SURVEY OF SPECIFIC READING DIFFICULTIES OF STUDENTS REFERRED TO THE READING CENTER IN A JUNIOR HIGH SCHOOL IN MILWAUKEE

Anne M. Bell

PROBLEM. The primary problem of this study was to determine the degree and types of reading deficiencies of students referred to a junior high school Reading Center in Milwaukee. Secondary to this problem was the objective of finding suitable measuring instruments which would aid in the location of these reading deficiencies. Standardized reading tests, although necessary, do not give a complete picture of the student's reading capabilities. They do not reveal the word attack skills he uses, nor do they always indicate accurately the student's actual achievement level in reading. Therefore, it seemed valuable to identify a possible combination of standardized and informal tests to be used in screening students referred to a Reading Center. Answers to the following questions were sought:

1. How retarded was the student in relation to his ability?

2. What particular deficiencies were most outstanding, e.g., substitutions, mispronunciations, et cetera?

3. How much did the independent and instructional levels differ from present grade placement?

4. Which tests would give the most information needed?

5. How can students who need help be identified?

This study was limited to the testing of a group of 25 students having reading difficulties in a junior high school. The total school population was 1,120. In addition, this study dealt with a diagnosis which could be administered with the facilities of a large school's Reading Center.

PROCEDURE. Twenty-five students from a junior high school were tested. All were in grades seven and eight. Seventeen of the group were boys and eight were girls.

The Lorge-Thorndike Intelligence Tests, which yielded a verbal and a non-verbal score, as well as total score, were given by the guidance department of the school. The vocabulary test of the Revised Stanford-Binet was administered individually. The Gates Reading Survey was selected to appraise three areas of silent reading: rate, vocabulary, and comprehension. The test has a wide range: from the latter part of grade three through grade ten. Three tests of the Gates Basic Reading Tests were used. They were Reading to Appreciate General Significance, Reading to Understand Precise Directions, and Reading to Note Detail. The word pronunciation test of the Wide Range Achievement Test was given to obtain an oral word recognition score. The Gilmore Oral Reading Test was used to measure accuracy, comprehension, and speed in oral reading. Types of oral reading errors were also recorded.

An informal reading inventory was administered to determine levels of reading for each student and to obtain an oral reading evaluation of comprehension, rate, and types of mechanical errors made.

After all tests were administered and scored, a diagnostic profile was constructed for each student. The diagnostic Reading Profiles are included in the thesis. This enabled the writer to make a quick appraisal of each student's deficiencies. Factors of reading achievement considered were vocabulary, mechanics, comprehension, and rate. The test scores attained by a student were compared with his reading expectancy grade score. The reading expectancy grade score was obtained by using the Bond formula: years in school x I.Q. + 1.0 = Reading Expectancy Grade Score.

FINDINGS. Students at the lowest levels of reading on the Diagnostic Reading Profile were typically retarded in all areas of reading. They tended to show a greater discrepancy between achievement and expectancy. Oral vocabulary scores generally exceeded word recognition and silent reading vocabulary scores. Scores in mechanics were lower than comprehension scores.

Students at all levels of achievement showed the greatest deficiency in word recognition. Mispronunication of words in both formal and informal oral reading tests was the specific weakness found most frequently. Students' scores on specific comprehension tests were better than on general comprehension tests. Rate of oral reading was exceedingly slow. Silent reading rate was generally below grade level, but as level of achievement rose, rate of silent reading approached expectancy. The independent and instructional levels were usually far below all other scores. In the case of many students, frustration level approximated the expectancy level.

Students at different achievement levels tended to be similar in the kinds of specific reading deficiencies they had. The difference between students at different levels was in degree of reading retardation.

SUMMARY AND CONCLUSIONS. Interpretation of data led to the following conclusions relative to the primary problem of this study:

1. Differences among pupils in degree of retardiation in tested reading skills was evident.

2. The greatest deficiencies noted were in the specific areas of word recognition, mechanics, and speed of reading.

Other conclusions of this study were:

1. Very poor readers who also had the lowest expectancy rating were retarded in all areas. As the level of achievement rose, the variation between scores became more noticeable.

2. The area of greatest weakness was word pronunciation. Considerable deficiency was also manifest in oral word recognition and silent reading vocabulary.

3. Pupils' independent levels ranged from 1.8 to 5.7 years below present grade placement. Their instructional levels varied from 4.9 years below present level placement to 2 months above present level placement.

4. The following tests were selected as helpful in obtaining information on students' reading status:

a. Wide Range Pronunciation Test

b. The Gates Reading Survey

c. The Informal Reading Inventory

The Wide Range Pronunciation Test gives a fairly accurate grade score in word recognition and can be used to analyze the method of word attack used by the student as well as to estimate his knowledge of consonants, blends, vowels, syllabication, and accent.

The Gates Reading Survey is a standardized test. This kind of test is desirable in order to make objective comparisons. It indicates whether the student is reading below, at, or above his grade level and his reading expectancy level.

The uses of the Informal Reading Inventory are many. It establishes approximate levels of reading. It reveals specific reading difficulties in mechanics and comprehension. It permits observation of mechanical errors in a functional situation.

5. The best instrument in identifying students who need help in reading is an intelligence test which does not penalize the student who has a reading problem. Comparison of performance in an oral reading vocabulary test with that in a silent reading vocabulary test may also be used to identify the student who needs help in reading.

A VOCABULARY STUDY OF THE THIRD READERS OF FIVE RECENTLY REVISED BASIC SERIES

Sister Marie Dominica Bilotta, S.C.M.M.

PROBLEM. The purpose of the present study was to make a comparative analysis of the vocabulary contained in the 3-1 readers of five recently revised series of basic reading texts with regard to the number of running words in each book, the identification and the rate of introduction of new words, the frequency of repetition for each word, and the overlapping vocabulary in these readers.

Specifically, the writer sought the answers to the following questions concerning the specified readers:

1. What is the total number of running words in each reader and the total number of different words?

2. How often is each word repeated in the various readers?

3. What is the rate of introduction of new words in each reader?

4. Which are the new words introduced in each book, and what per cent of the total vocabulary do the new words represent?

5. How do these basal readers vary in their vocabulary content?

6. To what degree does overlapping of vocabulary occur in the readers studied?

7. In which two readers does the greatest amount of overlapping of new words occur?

PROCEDURE. A frequency count of the total number of words in each book was made by obtaining a total vocabulary listing and placing a tally mark beside each word as often as it occurred. The words were then added to find the total number of different words in each book, and the tallies were scored to find the total number of running words in each reader. The inflectional unit of counting was used to find these totals, and the following forms were included:

1. Plurals of nouns ending in -s, -es, -ies.
2. Verb forms ending in -s, -d, -ed, -ied, -en.
3. Adjective and adverb forms ending in -y, -n, -ly, -r, -er.
4. Contractions.
5. Possessives.
6. Abbreviations.

The rate of introduction of new words was obtained by dividing the total number of running words by the total number of new words in each book.

In order to ascertain the number of words and to identify the words which were common to the third readers of the five series studied, one alphabetical list was compiled from the several ones and was arranged to indicate the frequency with which each word occurred in the various readers.

The degree of overlapping vocabulary of the total number of different words and of the new words introduced at this level was found from the data appearing in the lists of words.

FINDINGS. The findings of the study were:

1. A total of 4,308 different words was found in the five third readers studied.

2. A total of 708 words was common to all five readers, or approximately 16.4 percent.

3. The total number of new words introduced in the five readers was 1,315.

4. Only one new word was common to all five books, namely the word queen, while mud with its variant muddy, and set with its variant setting were found in all the readers.

5. Of the 1,315 new words introduced in all the readers, 12 words, or .9 per cent, were common to four of the five readers.

6. A total of 49 new words, or 3.7 per cent, were common to three of the five readers.

7. Book A contained 302 new words, or approximately 23.0 per cent of the total number of new words introduced in all five readers.

8. Book B contained 395 new words, or approximately 30.0 per cent of the total number of new words introduced in all five readers.

9. Book C contained 316 new words, or approximately 24.0 per cent of the total number of new words introduced in all five readers.

10. Book D contained 335 new words, or approximately 25.5 per cent of the total number of new words introduced in all five readers.

11. Book E contained 370 new words, or approximately 28.1 per cent of the total number of new words introduced in all five readers.

12. The average number of repetitions of the new words was approximately: 14.0 times in Book A, 10.9 times in Book B, 10.1 times in Book C, 10.5 times in Book D, and 7.9 times in Book E.

13. The greatest degree of overlapping of new words between any two of the readers was found in Books B and E, in which 100 new words were found to be common to both books. These words represented 25.3 per cent of the total number of new words contained in Book B, and 27.0 per cent of the total number of new words contained in Book E.

SUMMARY AND CONCLUSIONS. The findings of the present vocabulary study would seem to warrant the following conclusions:

1. The readers varied greatly with reference to the amount of reading material and extent of vocabulary. Many words were found in only one, two, or three books.

2. Considerable diversity was found in the new vocabulary together with a very small degree of overlapping.

3. The rates of introduction of new words in the different books were quite varied.

4. There seemed to be no general agreement among the readers studied as to the reading level at which certain words shouls be introduced. Some of the words were found to have been introduced at a higher level.

5. The readers also differed greatly in the number of repetitions for new words.

THE EFFECT OF A DIRECTED READING ACTIVITIES PROGRAM IN THE TEACHING OF A CONTENT SUBJECT AT THE NINTH GRADE LEVEL ON READING ACHIEVEMENT AND IMPROVEMENT IN STUDY SKILLS

Sister Francis Agnes Blake, C.S.J.

PROBLEM. The purpose of this experimental study was to evaluate the effect upon reading achievement and improvement in study skills when following a directed reading activities program in the teaching of World History to ninth-grade students.

Specific questions investigated were:

1. Will students who receive planned reading-study skills instruction in and through content subject reaching, make more favorable progress in reading-study skills achievement than those who receive no such training in their content courses?

2. To what extent will teaching a content subject by means of a directed reading activities method provide for a developmental reading program at the secondary level?

PROCEDURE. The sample consisted of 60 students from a parochial high school in Massachusetts. Thirty students formed the Experimental group which was taught the content subject of World History on the ninth grade level by means of a directed reading activities program. The Control group consisted of thirty students who were taught the same subject without any directed reading activities program. The teacher, the text, and the time allotment were the same for both groups.

At the beginning of the experimental period, the California Test of Mental Maturity, the California Test of Reading Achievement, and the Spitzer Study Skills Test were administered to determine mental ages, and initial reading and study skills ability to both groups. At the close of the experimental period, different forms of the reading and study skills tests were administered.

FINDINGS. 1. At the close of the experiment, the difference between final mean grade scores of the Experimental and Control groups in reading was .39 in favor of the Experimental group yielding a t-score of 1.260, which, although not statistically significant, was much higher than that of .126 at the beginning of the experiment. Furthermore, at the opening the difference was in favor of the Control group, whereas at the end the difference was in favor of the Experimental group.

2. The difference between the two groups in study skills ability at the close of the experiment was 6.09 in favor of the Experimental group, which yielded a t-value of 2.886, significant at the .01 level of confidence.

3. A mean difference of .20 was found in comparing initial and final reading achievement scores of the control group. This difference, which favored the final score, yielded a t-ratio of 1.11, which was insignificant. For the Experimental group, the mean difference between initial and final scores was .62 in favor of the final test which yielded a t-ratio of 4.1333, significant at the .001 level of confidence.

4. The mean gains in all areas of the study skills test favored the Experiment group with the exception of one skill, namely, interpretation of graphic material.

SUMMARY AND CONCLUSIONS. 1. Teaching World History to ninth-grade students by using a directed reading activities program greatly improved the general reading achievement of these students.

2. Following a directed reading activities program in the teaching of World History to ninth-grade students resulted in a highly significant improvement in study skills abilities.

3. Those ninth-grade students who received planned instruction in reading-study skills in and through the content subject of World History made greater gains in reading-study skills achievement than did those who received no such instruction.

4. The teaching of a content subject using a directed reading activities program would offer an excellent means of providing a systematic, sequential, developmental reading program in the high school as is evidenced by the data presented in this study.

AN EVALUATION OF RECENT CATHOLIC BOOKS FOR CHILDREN IN THE SEVEN TO TWELVE YEAR AGE GROUP ACCORDING TO THE CHRISTIAN SOCIAL PRINCIPLES

Mother Mary Honora Breig, O.S.U.

PROBLEM. The purpose of this study was to evaluate a selected list of Catholic books written for the elementary grades in order to ascertain the intrinsic values inherent in these books as a means of teaching the Christian Social Principles and thus eliciting the noblest of ideals and virtue through the appreciation of good literature. The books in this study were limited to those considered Catholic in principle and studied from the standpoint of the Christian Social Principles.

PROCEDURE. The writer perused related literature for a thorough understanding of such Christian Social Principles as God's Providence in the affairs of men, human dignity and the brotherhood of mankind, to obtain a background for the compilation of evaluative criteria.

The next step was to establish a criterion for evaluating these books according to the five basic Christian Social Principles and to construct a scale whereby these books could be evaluated. Finally the principles were analyzed in detail as a basis for determining specific examples of each principle, which would serve as a guide in applying the criteria to the books. Because of the valuable guide to book selection offered by the Catholic Booklist, 50 books were finally selected from these lists for 1957-1961 for children in the seven-to twelve-year age group.

The books were classified according to biography of saints, general biography, and fiction. Each book was read and examined for its application of the Christian Social Principles. The annotations were listed on a worksheet prepared for this purpose, and the frequency of examples of specific principles tabulated. A table was prepared for each type of book, and data were grouped accordingly. The frequencies of occurrence of each particular principle were summarized. A comparison of the average frequencies of incidences portraying these principles was next indicated. Quality of protrayal was also noted. In order that the reader might follow in greater detail the Christian Social Principles in the book, the exact statements in each book as originally analyzed were given in the appendix.

FINDINGS. Principles a, b, and c, concerned with the providence of God in the affairs of men, man's dignity, and the unity of all men were found most frequently in the biography of the saints.

Principles c and d involving the unity of men and their interdependence were found the greatest number of times in general biography, dealing as they do with men's actions toward one another.

In general, the Christian Social Principles were found less frequently in fiction. However, many of the books of fiction listed gave examples of prayer, gratitude for God's gifts, and love for one another.

SUMMARY AND CONCLUSIONS. The study revealed that Catholic books have made a definite contribution to Christian Social living of boys and girls by furnishing them with examples of courage, self-sacrifice, obedience and love for one another.

A SURVEY OF READING SKILLS EMPHASIZED BY TEACHERS OF GRADES FOUR, FIVE, AND SIX IN SELECTED SCHOOLS OF THREE MIDWESTERN STATES

Sister Ann Josephine Brogan, S.N.D. de N.

PROBLEM. The purpose of this study was to determine whether or not teachers of grades four, five, and six in 41 selected schools in three midwestern states gave balance and adequate emphasis to skills considered important by leading educators in the field of reading. A secondary objective was to determine the strengths and weaknesses of these teachers from a comparative study of the data obtained and current pedagogical trends in order to pave the way for an in-service program as a means of enriching the skills program in the intermediate grades of the schools concerned.

PROCEDURE. The procedure used in this study was a normative-survey using the questionnaire and analytical techniques. The questionnaire was compiled on the basis of research and the study of writings of authorities and consisted of four parts: general information, check list of reading skills, attitudes, and improvement of teachers in-service.

The responses of the teachers were tallied, converted into percentages and assembled into appropriate tables as a basis for analysis and interpretation. The specific reading skills were studied from the viewpoint of emphasis given by the teachers compared with that recommended by authorities in the field of reading.

FINDINGS. The findings of this study may be summarized under three general headings:

1. Teacher experience and background:
    (a) Teachers on the lower levels of the intermediate grades have fewer years teaching experience than do those teachers of the upper level.

   (b) Slightly less than half the teachers have their Bachelor's Degree, and the majority of the remaining number are nearing their degree.
   (c) In terms of reading courses taken, the fourth-grade teachers have the strongest educational background and the sixth-grade teachers the weakest.

2. Teacher attitudes:
   (a) The majority of the teachers enjoy teaching reading and consider lesson planning an interesting challenge.
   (b) The teacher's manual is considered to give adequate help to the majority of teachers using it in conjunction with other aids.
   (c) College reading courses and the present in-service programs are considered inadequate.

3. Skill emphasis:
   (a) In most of the skills studied the emphasis given by the teachers is in essential agreement with that proposed by leading authorities in the field.
   (b) Although syllabification and the study of affixes are ordinarily emphasized at the intermediate-grade level, the teachers considered these word recognition skills merely as an aspect to be reviewed.
   (c) Teachers differ with the authorities in the lack of significance they give to oral and silent reading.
   (d) Teachers give an over-emphasis to associative reading skills and some aspects of free reading.

SUMMARY AND CONCLUSIONS. This study was undertaken in order to come to a greater understanding of teacher-needs and thereby suggest a helpful preservice and in-service program. The teachers polled do have a better overview of reading than anticipated; however, the challenge of thinking through the questionnaire was in itself a stimulus to evaluate their skill-teaching in this field.

Further implications include:

1. Course work and in-service training regarding:

(a) Greater emphasis on word recognition skills at the intermediate-grade level.
(b) Broader view of oral and silent reading.
(c) Functional use of higher types of reading skills.
(d) Placement of skill emphasis.
(e) Use of manual and other teacher aids.

2. A definite in-service program in which teachers have a share in planning and evaluating.

AN ANALYTICAL STUDY OF CONSUMABLE READING WORKBOOKS IN THE SEVENTH, EIGHTH, AND NINTH GRADES

Robert J. Burke

PROBLEM. The purpose of this study was to determine the availability and variation in type of consumable workbook material at the junior high school level. The specific objectives of the study were these:

1. How much material is available?
2. What types of exercises are contained in each individual workbook? Are they primarily explanations of skills or actual development of skills through practice exercises?
3. Is there a balance of skills in the workbooks?
4. What special features for facilitating use by teachers does each workbook contain?
5. What special features does each contain for the motivation and direction of pupils?

This study was restricted to consumable workbook materials for developmental reading at the junior high school level published before 1960. Even though serious effort was made to collect all available material of this type, some publications may have been omitted. This study was also limited to consumable materials independent of basal textbooks and to workbooks, although a companion to a basal text can be used independently.

PROCEDURE. To determine the skills to be introduced or maintained at the junior high school level, an analysis was made of indices of reading workbooks, and a list of skills was drawn up. The index of the Skill Development for Deeds of Men[1] with some minor additions and deletions served as a major source in the development of this list. Literature in the area of general skills and practice work was perused to find what skills specialists in the field of reading thought should be maintained or introduced at the junior high school level. These skills were classified under the following four major headings:

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[1] Guy L. Bond, Theodore Clymer, Naomi Chase, and Dorothy Cooke, Deeds of Men (Chicago: Lyons and Carnahan, 1959), index.

1. Word recognition
2. Meaning development
3. Study skills
4. Comprehension abilities

These skills were studied, and the publications of reading specialists were analyzed to determine the skills mentioned by them in relation to junior high school reading.

A form letter was sent to 252 publishing companies in the United States requesting consumable workbook material for the junior high school level. The addresses of these publishers were obtained from Book Industry Register[2] and Children's Catalog[3] The materials centers at Cardinal Stritch College, the University of Chicago, and Marquette University were also checked for this type of material.

By exploring some features considered essential in choosing workbooks, and by making a study of skills which experts in the field of reading say should be developed or maintained at the junior high school level, the writer developed evaluative criteria for: (1) format, (2) directions, (3) types and variations, (4) sequence and gradation of skills, (5) diagnostic possibilities, and (6) effective teacher aids.

FINDINGS. The study revealed the following pertinent data about the workbooks for the junior high school level which were evaluated in this study:

1. The teacher is limited to a narrow selection of workbooks, especially so as one progresses from grade seven to grade nine.

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[2] Book Industry Register (New York: R. W. Bowker Co., 1959-1960), p. 254.

[3] Marion L. McConnell and Dorothy Herbert West (compilers) Children's Catalog, Ninth Ed. (New York: H. W. Wilson Co., 1956) pp. 850-852.

2. Workbooks emphasizing varied skills material have their exercises constructed to perform the functions their author intended, but examples were rarely given and only two books of this type gave an opportunity for the pupil to make a wide choice of responses. Much of this type of material can be used to detect pupil weaknesses and the lessons can be used again to correct pupil deficiencies. Most varied skills workbooks have a sequential development and a gradation of skills can be seen. Five workbooks of this type contain mastery tests, but the tests cannot be easily checked. Few of these workbooks have a teacher's manual, and none are efficient in following good developmental procedures. Workbooks of this type emphasize exercises in meaning development and comprehension skills.

3. Comprehension skills workbooks contain three of the essential features evaluated, but four of them do not have a sequence of development or gradation of skills and none of these workbooks contain mastery tests or efficient teacher guides. Workbooks of this type stress meaning development and comprehension skills with exercises planned to maintain a balance of skills in word recognition and basic study skills.

4. Workbooks which stress word attack skills have their lessons constructed to give a sequence and gradation in the development of skills. Lessons can be used to detect and correct pupil deficiencies, but there is a lack of an efficient teacher's guide and none of the books contains mastery tests.

Workbooks of this type stress word recognition with auditory and phonetic aids receiving emphasis. Word meaning is also stressed in this type of material.

SUMMARY AND CONCLUSIONS. From an analysis of the data obtained in the evaluation, it seems reasonable to draw these conclusions:

1. There is a narrow choice of workbooks in varied skills workbooks, workbooks which stress word attack, and workbooks which emphasize comprehension abilities. As the grade level advanced, this choice became even narrower. Workbooks in

word attack were quite limited at the eighth-and ninth-grade level.

2. Workbooks which contain varied skill exercises do not give much emphasis to word attack and basic study skills. Workbooks in comprehension development stress those skills and there is a balance in word recognition exercises. Meaning aids receive emphasis under meaning development exercises.

3. The skills developed within the workbooks are developed through practice exercises.

4. Although some workbooks do have a teacher's manual, in no instance does any one of them outline good developmental procedures.

5. All workbooks evaluated contain directions for pupils, but only ten of the 28 contain some motivational material for pupils, such as charts and graphs to record progress.

THE EFFECTS OF GRADUATE READING COURSES UPON THE ATTITUDES AND PRACTICES OF TEACHERS IN THE FIELD OF READING

Sister Georgine Marie Crowley, O.P.

PROBLEM. The purpose of this study was to determine whether specific graduate reading courses offered at The Cardinal Stritch College have effected a change in the attitudes and practices of teachers in the field of reading. Also evolving from this survey would be an evaluation of the reading courses given at The Cardinal Stritch College. Course strengths and weaknesses could be analyzed and necessary revisions structured through the interpretation of the data.

PROCEDURE. The survey was conducted by means of a questionnaire sent to all students in attendance at The Cardinal Stritch College who had completed at least the first two required graduate reading courses. All those in attendance from the summer of 1956 through the summer of 1961 were included in the study. The questionnaire was constructed to include all important aspects of reading, both in regard to theory and the actual realization of this theory in teaching procedure. In its final form, the questionnaire was comprised of four parts and contained 89 items relative to reading theory and instructional procedure.

Part One of the questionnaire sought information concerning previous teaching experience, academic training, and graduate work completed. Part Two was concerned with the attitudes and practices of respondents previous to taking graduate courses. Parts Three and Four were constructed to secure detailed information pertaining to the effects of graduate reading courses on the attitudes and practices of teachers in the field of reading.

Parts Two and Three required respondents to rate attitudes and practices according to the degree of importance which they judged that each item should receive. The following rating scale was used in Part Two:

1 = major importance
2 = considerable importance
3 = moderate importance
4 = little importance
5 = no importance
6 = no consideration

In Part Three, the same scale was used, omitting number six, because after having taken graduate reading courses, respondents would necessarily have given some consideration to all items. Part Four consisted of statements followed by a number of choices with space supplied after each for additional comments.

Data from Part One relative to the educational and experiential background of respondents were tabulated. Data from the remaining three parts of the questionnaire were separated according to areas of experience as indicated in Part One. Rating scale responses were totaled and per cents were computed regarding the percentage of teachers rating the item according to degree of importance. Data pertaining to reading principles considered important by respondents *before* taking graduate reading courses comprised one table while data pertaining to reading principles considered important by respondents *after* taking graduate reading courses comprised most of the other tables.

FINDINGS. Part One: Among the respondents, a wide range of teaching experience was revealed - a range of from two to thirty-seven years among all groups. With the exception of the primary teachers, all other groups had had experience at all elementary levels. Ninety-six per cent had received bachelor's degrees and approximately 50 per cent had done so within the past ten years. Among all the groups, 23.1 per cent had received master's degrees and 76.9 per cent were engaged in the master of arts program.

Part Two. The results of these data clearly indicated that at the completion of undergraduate work and before undertaking graduate work, there existed a divorce between theory and practice. The majority of respondents were consistent in considering most items of only moderate importance and very few items of major importance. Many times and by large majorities the items had never been given consideration.

Parts Three and Four: Data indicated great differences between attitudes and practices of respondents before and after completing a minimum of two graduate courses. No longer were items considered of only moderate value by large percentages of respondents. The area of greatest change was that concerned with the "School reading program." An overwhelming majority rated all items in this area as having "major importance." Before completing graduate courses these same respondents rated all items in this area as having either "moderate importance" or "little importance."

Both remedial teachers and consultants rated more items of "moderate value" than did any of the other groups. Their rating of importance contrasted sharply with those of the other respondents.

Evaluations given to factors pertaining to comprehension and interpretation were especially significant. A median percentage of 93.0 of all respondents rated all these facts as either of major or considerable importance. This was significant in view of Austin's findings of neglect of this area at the undergraduate level.

An item concerning the appropriate grade level at which to begin emphasizing silent reading over oral reading elicited diverse responses.

Aspects of the courses considered most beneficial by the majority of respondents were those which emphasized practical application of theory. Some judged that more emphasis should be given to actual practice of methods and techniques, with demonstration by students followed by a critique. A few areas of reading skill were mentioned as needing more stress. Few respondents thought that any area should receive less emphasis. However, some thought that less emphasis could be given theory but only for the purpose of devoting more time for practice in teaching procedure. Most respondents were enthusiastic in their comments concerning the courses and were already deriving great satisfaction from applied research in their classrooms.

SUMMARY AND CONCLUSIONS. Because the results of this survey incate that further study by experienced teachers produces a better understanding of the problems involved in reading instruction and that reading instruction at the classroom level did reflect both current research and theory after graduate work, the following conclusions were made:

1. In-service training should be continued after the teacher has had from three to five years of experience.

2. This training should be conducted by means not merely of workshops held by specific schools in specific areas, but that further professional training by way of sequential courses be given at the graduate level.

3. Those who are in an area of specialization should keep abreast of current research and make theory compatible with instructional procedure, thereby avoiding narrowness and rigidity.

THE EFFECT OF PRACTICE IN THE READING OF ARITHMETIC PROBLEMS UPON THE ACHIEVEMENT IN ARITHMETIC OF THIRD GRADE PUPILS

T. Mary Cullen

PROBLEM. The purpose of this experimental study was to ascertain the effect of training in guided reading of word problems in arithmetic on arithmetic achievement of third-grade pupils.

Specific questions investigated were:

1. Will training in reading word problems increase the total arithmetic achievement of third-grade pupils?

2. Will training in reading problems increase the arithmetical reasoning achievement of third-grade pupils?

3. Will training in reading problems increase total reading achievement?

The experiment included 42 third-grade pupils of varied socio-economic background, located in a small, maritime area of northeastern Massachusetts. The experiment encompassed a period of approximately four months, and the groups were taught by teachers of comparable abilities. The size of the groups and the short duration of the study were recognized as limitations of the study.

PROCEDURE. An experimental and control group were formed and equated on the basis of results obtained from the following tests:

1. Kuhlmann-Anderson Test: mental age.
2. SRA Achievement Series-Reading: total reading.
3. SRA Achievement Series-Arithmetic: arithmetic reasoning and total arithmetic achievement.

For approximately 35 minutes, three times a week, word problems were discussed. Textbooks and instructional worksheets were utilized. A guided silent-oral procedure preceded the solution of the problem. In order to develop proficiency in reading word problems, practice in five types of word problems was given.

FINDINGS. At the termination of the experimental period, a comparative analysis of achievement of the two groups was undertaken.

The mean arithmetic achievement grade score for the experimental group was 4.12, while that of the control group was 3.83. At t-value of 1.115, which was not statistically significant, was obtained.

The mean grade score in arithmetic reasoning achievement obtained by the experimental group was 4.55, while that of the control group was 3.60. The resulting t-value of 2.568 was significant at the .02 level of confidence.

The experimental group had a mean reading achievement score of 4.35 and the control group a mean of 3.92. The t-value of 3.308 was significant at the .01 level of confidence.

SUMMARY AND CONCLUSIONS. From the analysis of results as a consequence of four months of intensive practice in the reading of word problems, the following conclusions can be proffered:

1. Training in reading problems in third grade arithmetic did not effect a statistical difference between the experimental and control group in total arithmetic achievement.

2. Training in reading word problems in arithmetic did affect achievement in arithmetical reasoning of these third grade pupils since the t-value of 2.568 favors the experimental group and is statistically significant at the .02 level of confidence.

3. Training in reading word problems did affect the total reading achievement of the experimental group. The t-test applied to the difference between means yielded a value of 3.308, significant at the .01 level of confidence.

A COMPARATIVE STUDY OF THE EFFECTIVENESS OF TWO METHODS OF MEETING INDIVIDUAL DIFFERENCES IN THE CLASSROOM READING PROGRAM

Sister Mary Christine Davidson, S.S.J.

PROBLEM. The writer was especially interested in objectively evaluating two organizational plans of meeting individual reading differences in the classroom. There has been much discussion about the superiority of ability grouping. One aspect which has received considerable attention is inter-class as opposed to intra-class grouping.

The problem of this investigation, therefore, was to determine if there is any significant difference between the reading achievement of pupils taught in the inter-class situation and of those taught in the intra-class grouping.

Questions of special interest in evaluating the two grouping plans became the objectives of the study:

1. Under which organizational plan, inter-class or intra-class grouping, do children make the greater progress in reading?

2. Does the gain made by inter-class grouping warrant the reorganizing of a school program?

3. What is the reaction of the teachers to the two plans?

4. What is the response of the children?

PROCEDURE. To insure objectivity of results, three specifications for the experimental study were determined at the outset:

1. Establishment of two statistically equivalent groups to be assigned at random as control and experimental groups.

3. Evaluation of both groups by identical instruments of measurement prior to and at the close of the experiment.

Subjects for this experiment were 252 seventh- and eighth-graders from two elementary schools in a northern city. They were divided into two groups equated on the bases of mental age, intelligence quotient, and reading achievement. The California Test of Mental Maturity and the California Reading Test, Form W, were employed to secure data for equating the groups. The reading test yields a grade score for vocabulary and comprehension in addition to a total reading score. All three scores were used to equate the groups.

When the 252 seventh and eighth graders, 126 for each school, had been divided into two statistically equivalent groups, one was assigned to ability groups by classes, while the other retained their homerooms as appointed at the time of promotion. Pupils were ranked for class placement according to reading ability. The students were distributed as follows:

1. Class One - 32 highest ranking readers in grade eight
2. Class Two - 31 pupils next in reading rank
3. Class Three - 32 highest ranking readers in grade seven
4. Class Four - 31 pupils next in reading rank

During the last week in May, Form Y of the California Reading Test was administered to determine progress in achievement. Family backgrounds for both groups were highly stable, and in general were of middle class socio-economic status.

Admitted and inevitable differences in teachers were equalized as far as possible in the assignment of an experienced teacher to the experimental group (inter-class grouping) and the appointment to the control group (intra-class grouping) of a highly qualified upper-grade teacher. Both teachers had completed at the time of this study fifteen years of teaching reading on the Junior High Level. However, one of the teachers became ill and had to be replaced in the experimental group for the last two months of the study. Although she was replaced by an equally competent teacher, it is felt that the adjustment for the students of the experimental group might have set them back slightly.

Teachers used the same curriculum, course of studies, and materials, but allowed for difference in rate of learning. With the fast learner, emphasis was placed upon enrichment rather than acceleration. The goal was not to take on the work of the next grade but rather to add an enrichment to the curriculum already set up for that grade.

Some examples of the enrichment program used were: supplementary projects, creative writing, adoption of the Junior Great Books Program, research, dramatics, and conversational French.

The same time schedule, methods of teaching, and materials were used with the control group, the only difference being that they were grouped by ability within the classroom to which they had been assigned heterogeneously.

FINDINGS. The results of the California Reading Test, Junior High Level, Form Y, which was used to evaluate the pupils' growth in grade score for vocabulary and comprehension in addition to a total reading score showed the advantage of the experimental group to be insignificant, the slight difference favoring the control group.

The comparison of the initial and final results attained by both groups revealed a decided and significant gain in mean scores for both groups although the gain was higher in the control group.

Findings may be summarized as follows:

1. There is no significant difference between the groups in reading vocabulary.

2. There is no significant difference between the groups in reading comprehension.

3. There is no significant difference between the groups in total reading.

4. There is a significant gain in initial and final test results for both groups in vocabulary, the gain being greater for the control group.

SUMMARY AND CONCLUSIONS. Analysis of the data gathered in this study points to the following conclusions:

The experiment presents evidence that inter-class ability grouping results in no significant superiority over intra-class grouping in reading achievement tested by standardized tests. Results in the present study favored the control (intra-class) group by an insignificant margin.

There is an indication that the gain achieved by the experimental group may have been increased had the same teacher completed the study as had begun it.

Perhaps nine months was a short time for deciding the benefits of inter-class ability grouping. Due to the adjustment that would have to be made by the pupils, especially those on the higher level, it may have rendered more marked results in a two-year period.

THE VALUE OF INTENSIVE TRAINING IN READING USING THE SRA READING LABORATORIES ON THE IMPROVEMENT OF READING ACHIEVEMENT OF EDUCATIONALLY HANDICAPPED BOYS IN GRADE SIX

Sister Mary Gertruda Feindt, I.H.M.

PROBLEM. The present study was undertaken with a twofold purpose: 1) to determine the reading achievement of the bright, the average, and the slow-learning pupils within the population, and 2) to evaluate the extent to which a four-month period of intensive training in reading, using the SRA Reading Laboratories, would affect the reading achievement of a sixth grade group, and in particular, the slow-learning boys within the group.

The investigation sought to answer the following questions:

1. Will intensive training in reading, using the SRA Reading Laboratories, prove equally effective for pupils at all levels of intelligence and achievement in the sixth grade?

2. Will the SRA Reading Laboratories specifically benefit the Educationally Handicapped in the sixth grade in regard to reading achievement?

3. Will the reading performance of the recipients of the SRA Reading Laboratories compare favorably with those participating in the reading program outlined by the diocese?

4. Will the reading selections of the SRA Reading Laboratories prove an incentive to foster interest in free, independent, or leisure-time reading?

PROCEDURE. The sample selected for the experiment included the writer's group of 32 sixth-grade boys from St. Aloysius Academy, Bryn Mawr, Pennsylvania, who were recipients of the SRA Reading Laboratories multilevel reading approach, while the contrasting group of 32 sixth-grade boys from Our Lady of Charity School, Brookhaven, Pennsylvania, followed the reading program outlined by the diocese. Both schools are in the suburban area of Philadelphia, and the population included pupils of the same socio-economic, cultural, educational, and religious backgrounds.

The Chi-square test of normalcy of distribution was applied to the mental age scores obtained from the Kuhlmann Anderson Test F, Sixth Edition, and yielded results which showed the population from which the participating groups were chosen to be normal.

Evidence that the Experimental and Control groups of the program were comparable with regard to mental age, reading capacity, and reading achievement was revealed through the application of the t-test to the test scores. Three standardized tests were administered to both groups, namely: The Kuhlmann-Anderson Test F, Sixth Edition, the Durrell-Sullivan Reading Capacity Test, and the Diagnostic Reading Tests, Form A.

The time allotted for the experimental study was a thirty-five minute daily period commencing October 1, 1962 and terminating March 27, 1963, a period of approximately twenty weeks.

The Control Group followed a basal reader program as outlined by the diocese, while the Experimental Group was taught by use of techniques included in the multilevel SRA Reading Laboratories program.

FINDINGS. 1. At the termination of the experimental period, both the Experimental and Control groups were retested with the Diagnostic Reading Test, Form B. The t-value was not significant.

2. Comparison of the initial and final reading achievement test scores for the Experimental Group revealed the mean initial score to be 56.25 and the mean final score to be 77.38. This yielded a t-ratio of 7.855 which was significant at the .001 level of confidence.

3. Analyses were made of ability sub-groups within the Experimental Group to answer the question: Will intensive training in reading, using the SRA Reading Laboratories, prove equally effective for pupils of all levels of intelligence and achievement in the sixth grade?

a. The mean of the Bright Group was 18.00 and the mean of the Middle Groups was 16.80. A statistically insignificant t-value, .205, was obtained.

b. The mean of the Bright Group, 18.00 contrasted with the Lower Group's mean of 27.91. The t-ratio of 1.666 was not significant, but favored the Lower Group.

c. Comparison of mean achievement of the Middle Group and the Lower Group resulted in a t-ratio of 2.016. This value was statistically insignificant, though high, and favored the Lower Group.

SUMMARY AND CONCLUSIONS. Within the limits of the present study, the following conclusions appear justified:

1. Although an insignificant difference was revealed through the intercomparisons of the three ability groups, the mean differences of percentile scores favored the Lower Group.

2. There was no difference in reading achievement between an Experimental Group taught with the SRA Reading Laboratories and a Control Group which followed the diocesan reading program.

3. The progress of the Experimental Group found by comparing the initial and final reading percentile scores showed significant difference at the .001 level of confidence. At the beginning of the project the group was at the 56th percentile; the final test results placed the group at the 77th percentile, revealing a gain of 21 percentile points in the four-month period.

4. Although this variable does not prove amenable to statistical treatment, information gathered incidentally could be considered to conclude that the reading selections of the SRA Reading Laboratories have proved to be an incentive to foster free, independent, or leisure-time reading.

THE EFFECT OF FOUR MONTHS OF TRAINING IN READING AND STUDY SKILLS ON THE PROGRESS OR ACHIEVEMENT IN SPECIFIC AND GENERAL READING SKILLS OF COLLEGE FRESHMEN

Reverend Raymond A. Fournier, S.M.

PROBLEM. Incoming freshmen are not always sufficiently prepared for the higher levels of reading and study skills necessary for effective learning in the college context. In a small college in Massachusetts, it was decided to initiate a semester course in those important skills. Several years afterwards, the college wished to evaluate the effectiveness of the methodology and content of the program.

PROCEDURE. Forty-three college freshman attending a small liberal arts college in the Boston area participated in the present study. Of these, 22 were given the reading program during the first semester of the 1961-62 academic year, while 21 were given fundamentally the same program during the first semester of the following year. The Cooperative Reading Comprehension Test was used for initial and final evaluation of students' progress. Form 1 B was administered in September and Form 1 C in January.

FINDINGS. The t-ratio indicated, for both groups that made up the complete sample, a significant gain in total reading skills and in speed of comprehension of the .001 level of significance. In vocabulary and level of comprehension, however, the gains were not as meaningful. No significant difference at the .05 level was noted for either group in level of comprehension; only one group made significant gains in vocabulary.

SUMMARY AND CONCLUSION. A study initiated to evaluate the current reading program in a small college was indicative of mixed results—excellent for total reading and speed of comprehension, but of lesser effectiveness in improving vocabulary and level of comprehension.

The study suggests that the above-mentioned reading program, although in part successful, be re-evaluated in terms of its specific goals and its methods, especially with respect to the teaching of comprehension skills.

EVALUATION OF PROGRESS MADE BY FORTY-THREE COLLEGE FRESHMEN IN A SPECIAL READING AND STUDY SKILLS IMPROVEMENT PROGRAM

	Group A (N = 22)		Group B (N = 21)	
	t-ratio	Level of Signif.	t-ratio	Level of Signif.
Vocabulary	2.58	> .05	1.65	< .05
Level of Comprehension	1.44	< .05	1.90	< .05
Speed of Comprehension	6.63	> .001	4.24	> .001
Total Reading	7.17	> .001	5.26	> .001

THE ROLE OF INDIVIDUALIZED READING INSTRUCTION IN THE IMPROVEMENT OF OTHER SCHOOL SUBJECTS

Sister Thomas Lucille Gallen, C.S.J.

PROBLEM. This study was undertaken to observe the effect of individualized reading instruction on the improvement of reading, spelling, and history.

The experiment sought answers to the following questions:

1. Will regular systematic instruction be beneficial to eighth-grade pupils?

2. Will there be a significant improvement in reading ability due to individualized instruction in reading?

3. What will be the effect of individualized reading instruction on achievement in history, a content subject?

4. Is spelling achievement aided as a result of individualized reading instruction?

5. Which level of mental ability will benefit most from individualized reading instruction?

PROCEDURE. The 39 eighth-grade pupils participating in the study had received no systematic instruction in reading while in grades five, six, and seven. Since the purpose of this study was to estimate the value, if any, of differentiated reading instruction, systematic instruction in reading was given during the first four months of the experimental period, using an eighth-grade basal text and workbook with all pupils.

The program consisted of directed reading activities based on previous learning and provision was made for new experiences. Exercises were given in silent reading and the use of study skills; vocabulary and comprehension skills were stressed and there followed a rereading for purposes of recapitulation. In spelling, a new list of words was learned each week. The daily spelling lesson consisted of learning spelling words and meanings from an approved spelling syllabus. A weekly spelling test was administered. Specific units were taught in history, utilizing teacher talks, history text, and teacher-constructed notes.

During the four months of the second stage of the experiment, flexible grouping was introduced providing basal texts, workbooks, and other materials according to the instructional level, needs, and interests of the children. Instructional levels were eighth grade, sixth grade, and fifth grade.

Initial tests of intelligence, reading, spelling, and history were administered in September. Tests in reading, spelling and history were re-administered in January and in June. The tests used were Kuhlmann-Anderson Form G, Gates Reading Survey Forms 1, 2, 3, National American History-Civics Test Forms A and B, and the Wide Range Achievement Test.

FINDINGS. 1. The mean grade score in reading achievement in September was 7.43 while in January it was 8.94. The resulting t-ratio of 10.06 was significant at the .001 level of confidence. The mean grade score in reading achievement in June was 10.09. Comparison of January and June scores yielded a t-ratio of 16.43, significant at the .001 level of confidence. Although progress in the September-January period was significant, that achieved in the January-June period was greater, as shown by a larger t-value.

2. Achievement in history followed a similar pattern. Comparison of mean raw scores from September and January testing resulted in a t-ratio of 6.81, significant at the .001 level of confidence. Comparison of achievement between January and June yielded a t-ratio of 8.92, significant at the .001 level of confidence. The larger t-value for the second period suggests that individualized reading instruction effected greater growth in history than did a program not so adapted.

3. Achievement in spelling was also compared for the September-January and January-June periods. Mean grade scores were 8.67 in September, 9.24 in January, and 9.82 in June. Improvement both in the first and second periods was significant at the .001 level of confidence. The t-ratios were 8.14 and 6.44 for the first and second periods, respectively.

4. The upper mental age group's range of reading scores in January was 8.0-12.2; the range in June was 8.5-12.5. The difference between mean January and mean June scores resulted in a t-ratio of 5.73, significant at the .01 level of confidence.

5. For the average mental age group, the range of reading scores in January was 6.6-10.7; the range in June was 8.4-11.5. The difference between mean January and mean June scores resulted in a t-ratio of 9.43, significant at the .01 level of confidence.

6. For the lower mental age group, the range of reading scores in January was 5.8-9.1; the range in June was 7.0-11.0. The difference between mean January and mean June scores yielded a t-ratio of 2.92, significant at the .05 level of confidence.

SUMMARY AND CONCLUSIONS. Statistical analysis and interpretation of the data would seem to justify the following conclusions:

1. Regular systematic reading instruction was highly beneficial for reading achievement of eighth-grade pupils.
2. Individualized instruction in reading based on instructional level, needs, and interests of pupils has greater value than does reading instruction not so planned.
3. Improvement in reading through individualized instruction significantly influenced achievement in history.
4. Individualized reading instruction aided spelling achievement, though not to as marked a degree as it influenced achievement in history.
5. Eighth-grade pupils of average mental age range seemed to benefit most by individualized reading instruction.

A HISTORY OF THE FIRST TEN YEARS OF THE CARDINAL CUSHING EDUCATIONAL CLINIC IN BOSTON

Sister Mary Benita Ganser, O.S.F.

PROBLEM. The major purpose of this study was to provide an historical perspective of the origin, development, and purposes of the Cardinal Cushing Educational Clinic from June, 1951 to June, 1961. A study of the first, fifth, and tenth years was made with the following objectives in mind: (1) to reveal the degree of retardation and progress made by students, (2) to evaluate the clientele and the number of cities and schools served, (3) to determine the range of intelligence quotients and to classify students according to grade, sex, and number of terms attended, (4) to designate the number of adult illiterates, total or functional, who have profited by clinical help.

The secondary purpose of this study was to provide data on the number of in-service teachers who have received undergraduate or graduate training in the field of reading specialist or consultant, and in the field of teaching mentally handicapped children. These college courses were offered at the Boston branch of the Cardinal Stritch College of Milwaukee, Wisconsin, functioning at the Cardinal Cushing Educational Clinic in Boston.

PROCEDURE. The information for this historical study was drawn from documentary reports of the foundation, development, and progress of the clinic over a ten-year period.

Approximately 3,500 student folders were reviewed. These records gave information concerning intelligence, chronological age, degree of retardation and progress, sex, grade in school, and number of terms attended. Occupation of parents and of adult students as well as the localities and schools served were obtained from these records.

Follow-up study was undertaken by means of a brief questionnaire, which was returned by 800 students. The questionnaire sought information concerning: amount of education pursued after discontinuing clinical instruction; student's evaluation of clinical instruction in the areas of word recognition skills, vocabulary, comprehension, rate, study skills; attitude toward independent reading; self-confidence; personal initiative; amount of leisure-time reading and informational reading; constructive criticism or suggestions regarding the functioning of the remedial program.

Records of undergraduate and graduate students taken from the files of the Boston Branch of the Cardinal Stritch College of Milwaukee revealed the number of in-service teachers who pursued college courses, and the number of students who completed graduate work and have received Master of Arts degrees as reading specialist or consultant or have graduated in the field of teaching the mentally handicapped.

FINDINGS. Study of the records from the first, fifth, and tenth years of service of the Cardinal Cushing Educational Clinic revealed the following information:

1. Degree of retardation among students enrolled in 1951: range 1-8 years, average 3.4 years; in 1955: range 1-9 years, average 2.2 years; in 1960: 1-10 years, average 1.6 years.

Progress made: 1951: range .6-8 years, average gain, 2.6 years. 1955: range 1-9.1 years, average gain, 2.5 years. 1960: range 1-10 years, average gain, 1.9 years.

2. Number of schools served: (Fall Term)
1951: students came from 34 public schools and 35 private schools.
1955: 68 public schools and 83 private schools
1960: 125 public schools and 118 private schools were represented.

3. Range of intelligence quotients: Policy of the clinic

places 80 as the lower limit of intelligence quotients for acceptance into the clinic. The range began with 80 and extended to 141 in 1951, 141 in 1955, and 143 in 1960.

4. The college branch of the Cardinal Stritch College at the Cardinal Cushing Educational Clinic has offered undergraduate courses since 1951 to in-service teachers. It has offered graduate courses since 1956 leading to Master of Arts degrees as reading specialists or reading consultants, and as teachers of the mentally handicapped. Approximately 800 students have attended these courses. At the time of this writing 32 students have received M.A. degrees as reading specialists and as teachers of the mentally handicapped.

SUMMARY AND CONCLUSIONS. The effectiveness of the clinic proper, and of the College Branch, during the first ten years, as viewed by the clinic staff, the public, parents, and the students, toward rehabilitation of frustrated children and adults, toward furthering better teaching of reading in our schools, and toward extending more clinical facilities through the college students who have received graduate training and degrees here at the Boston Branch of the Cardinal Stritch College, is an impetus for continuing efforts on the part of the faculties and others, in the much-needed field of increasing the reading efficiency of the citizens of our country. The members of the staff are grateful for the cooperation given by the students, parents, and the public.

AN EXPERIMENTAL STUDY OF THE EFFECTIVENESS OF THE INTEGRATED LANGUAGE ARTS APPROACH AND THE SEPARATE SUBJECT APPROACH IN THE TEACHING OF READING, SPELLING, AND ENGLISH IN GRADES ONE AND TWO

Sister Mary Edward Garceau, F.C.S.C.J.

PROBLEM. The goal of this study was to compare the values of the integrated language arts approach and the basal reader approach in which reading, spelling, and English are taught separately, for pupils in grades one and two. The integrated language arts approach was adapted to the English language by the writer. It was developed in Canada for the teaching of French.

PROCEDURE. Sixty-four pupils in grades one and two were the subjects of this study. Pupils in each grade were divided into experimental and control groups equated in mental age, reading readiness or initial reading, and initial spelling. There were 16 pupils in each of the groups. Initial tests for grade one were the Kuhlmann-Anderson Test Form B and the Webster Reading Readiness Test. Second grade pupils were administered the Kuhlmann-Anderson Test, the Metropolitan Achievement Test Form B Primary I Battery, and the Wide Range Achievement Test in spelling.

Three hours of daily instruction were devoted to the teaching of the language arts for experimental and control groups. The language arts were taught as an integrated whole to the experimental groups while the control groups had separate periods of instruction in reading, spelling, and English. Materials for the experimental groups were prepared by the writer. The teacher of the control group used The Faith and Freedom Basic Readers and the workbook, Goals in Spelling.

The experimental first grade group was taught 15 sentences which were analyzed into phrases, words, syllables, and letters. The words in these sentences were used as key words in the study of phonetics. Spelling and English were taught by means of the sentences.

FINDINGS. 1. Reading: Both the experimental and control groups of grades one and two made statistically significant progress in reading. There was no statistically significant difference in mean reading achievement between experimental and control groups at either grade level, but the differences obtained favored the control groups.

2. Spelling: Second grade pupils in the experimental group achieved greater growth in spelling than the control group. The t-ratio was 2.08, significant at the .05 level of confidence. There was no statistically significant difference in spelling achievement between the first-grade groups, but the difference favored the control group.

3. English: At the second grade level, there was no significant difference between groups in English. The difference favored the experimental group. At the first grade level, the experimental group achieved significantly greater growth in English than the control group. The t-ratio was 3.12, significant at the .001 level of confidence.

4. Penmanship: At the second grade level there was no significant difference in mean penmanship scores between the control and experimental groups. The difference favored the experimental group. Similar results were obtained at the first grade level.

SUMMARY AND CONCLUSIONS. Since the language arts are closely related, further research is advised to develop curricula and materials for teaching the language arts by an integrated method.

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THE EFFECT OF AN INTENSIVE USE OF THE SRA READING LABORATORY MATERIALS FOR REMEDIAL READING INSTRUCTION ACCORDING TO THE NEEDS OF SIXTH GRADE PUPILS FOLLOWING A MULTI-LEVEL READING PROGRAM FOR THEIR DEVELOPMENTAL READING INSTRUCTION

Sister Mary Therese Gavin, S.C.H.

PROBLEM. The present research has been concerned with greater individualization of reading instruction through the use of multi-level materials and techniques. The study was planned to answer the following questions:

1. Would a conventional developmental sixth-grade-multi-level reading program supplemented by the SRA Reading Laboratory yield greater progress than such a program without supplementation by SRA materials?

2. Would the use of the SRA Reading Laboratory significantly increase the reading achievement of retarded readers?

3. Would the use of these materials increase the reading achievement of the normal and accelerated readers?

4. Which reading skills would be most affected by the use of SRA materials: rate, vocabulary, or comprehension?

PROCEDURE. The sample consisted of 245 sixth-grade pupils from eight schools in the Halifax area. Two schools were selected from each of the four sections of the city and each section thus had an experimental and a control group. The experimental group totaled 127 pupils; the control group totaled 118. The groups were equated in mental age and IQ using the Henmon-Nelson Test of Mental Ability. The Gates Reading Survey Form I was used to equate groups in reading speed, vocabulary, comprehension, and total reading.

Each teacher administered the initial and final tests in addition to teaching her own group. Variables such as teaching method, materials, and time allottment were kept constant, except for the experimental variable, the use of SRA materials.

Pupils whose mental ages were below their respective reading ages were defined as retarded readers. Pupils were considered to be normal readers if their reading age scores were from one to six months above their respective mental ages. Pupils whose reading age scores exceeded their mental ages by more than six months were considered accelerated readers.

FINDINGS. 1. At the close of the experiment, the mean total reading score of the experimental group was 7.09; that of the control group was 7.70. A t-value of 3.05, significant at the .01 level of confidence, was found in favor of the control group.

2. Initial and final mean scores of the 69 retarded readers in the experimental group were analyzed with the following results. Improvement both in total reading and in reading speed was found to be significant at the .001 level of confidence. Improvement in reading vocabulary was found to be significant at the .05 level of confidence, while there was an insignificant difference between initial and final comprehension scores.

3. The 24 normal readers in the experimental group exhibited no statistically significant differences between initial and final scores in any of the four variables: total reading, speed, vocabulary, and comprehension. Loss from initial to final means was manifest in speed and in comprehension.

4. The 21 accelerated readers in the experimental group exhibited no statistically significant differences between initial and final scores in any of the four variables. The data revealed loss from initial to final testing in all variables except vocabulary.

SUMMARY AND CONCLUSIONS. The following conclusions seem to be justified by the outcomes of this experimental study:

1. A conventional developmental sixth-grade multi-level reading program supplemented by the SRA Reading Laboratory does not yield greater progress than does instruction without supplementation by SRA materials.

2. Remedial reading instruction with the aid of the SRA Reading Laboratory does significantly increase the reading achievement of retarded readers.

3. The use of SRA materials did not significantly increase the reading achievement of normal and accelerated readers.

4. In order of importance, the reading skills affected by use of SRA materials were speed, vocabulary, and comprehension.

A STUDY OF THE EXTENT AND TYPE OF READING PROBLEMS OF CHILDREN IN GRADES FOUR TO SEVEN AS A BASIS FOR THE ESTABLISHMENT OF A READING CENTER

Sister M. Gerald Gaynor, O.S.F.

PROBLEM. The purpose of this study was to ascertain the extent and type of reading problems prevalent in two east-side Indianapolis schools in order to determine the kind of program that will be most beneficial to the retarded reader. A study was made of the number of children retarded in reading as determined by teacher judgment in the lower section of homogeneously grouped classes and the number of retarded readers as determined by tests and teacher judgment in heterogeneously grouped classes. The specific objectives were: (1) to determine what percentage of retardation in reading existed in the total population, (2) to learn whether there was more retardation among pupils in the upper intelligence group or among pupils in the lower intelligence group, (3) to find the grade level with the greatest incidence of retardation, (4) to ascertain the phase of reading — vocabulary, comprehension, or speed — in which there was the greatest retardation.

The study was limited in that the data were obtained from a group test of ability and a group test of reading. It was also limited to 298 pupils in grades four through seven in two schools. By comparing actual retardation found through testing with the retardation indicated by teacher opinion and grouping, it was hoped that some observations could be made on the identification of retarded readers who are often mistaken for retarded learners.

PROCEDURE. All of the 143 pupils in grades four through seven of the lower section of homogeneously-grouped School A and all 155 pupils in grades four through seven in heterogeneously-grouped School B participated in the study. The testing program, which included the administration of the Gates Reading Survey Form 1, and the Lorge-Thorndike

Nonverbal Intelligence Tests Levels 3 and 4, covered a two-week period. After the administration and scoring was completed, the reading expectancy for each of the 298 children was calculated by the Bond and Tinker formula: years in school x I.Q. + 1.0. The study was then restricted to 114 children whose reading achievement was at least six months below their expectancy level. Additional study was then made of the Vocabulary, Comprehension, and Speed scores of the 114 retarded readers on the Gates Reading Survey in relation to expectancy level. Statistical data involved means and percentages.

FINDINGS. The principal finding of this study was that reading retardation existed in both schools to an almost identical degree, despite the two different methods of grouping. Before presenting the findings it is important to note that a very close comparison of the two schools is impossible. The children chosen from School A included only those previously considered retarded readers by their teachers while those chosen from School B included all levels and abilities.

1. Retarded readers comprised 38 per cent of the 298 children tested in this study. Of the 143 pupils from School A, 41 per cent or 59 pupils were retarded six months or more, and the retarded readers from School B's enrollment of 155 amounted to 35 per cent or 55 pupils so retarded.

2. Examination of the mean intelligence quotients for the retarded readers in both schools at all four grade levels indicated that the majority of these children have average mental ability. There was greater retardation among those considered in the upper intelligence groups as 45 per cent had I.Q.'s between 91 and 110; 32 per cent had I.Q.'s above 110. The studied population was comprised mainly of retarded readers and not slow or retarded learners.

3. Retarded readers as a group performed from six months to one year seven months below estimated potential. The average retardation was one year, two months. Mean achievement of the homogeneously-grouped children in School A was

slightly higher than that of the heterogeneously-grouped children of School B. This finding is of significance as the homogeneous children likewise, with the exception of the fourth grade, achieved higher mean intelligence scores than did the heterogeneously-grouped children. It was evident that many children classified in lower groups were not low or even mediocre in intelligence.

4. The greatest incidence of retardation occured in the seventh grades where an identical mean difference between expectancy and achievement level was observed in both schools. This difference was one year, seven months. An almost identical retardation was seen in the sixth grade. The least incidence of retardation occured in the homogeneously-grouped fourth grade.

5. There was a larger percentage of children retarded in Speed than any other area as 89 per cent were six months or more below expectancy. Comprehension ranked second in the greater retardation analysis with 76 per cent below expectancy.

SUMMARY AND CONCLUSIONS. The conclusions, based on the findings of this study are:

1. As a group, the fourth graders appeared to be reading rather close to expectancy. However, the nine months' retardation exhibited by these pupils is as serious as the one or two years' retardation at the upper level. This implies that in general the reading programs at the primary level are not producing satisfactory results in individual cases.

2. Since the results of the tests proved a lag in performance among the sixth and seventh graders, there is a need for concentrated effort in the immediate future on improvement of reading instruction in the upper grades. Some explanation of the lag needs to be sought. It may be that the lag is due to the difference in teaching practices in reading at the primary, intermediate and upper grade levels, or it may be that reading is not adequately taught above the fourth grades in these particular schools.

3. The range of intelligence was practically the same for retarded readers in the heterogeneous and homogeneous groups and both groups included some children with high potentials. This raises a question about grouping: Should children with high ability be placed in the same group with low ability, even though at the same level, because of differences in learning rate?

4. In noting the retardation in relation to I.Q. range, it is necessary to consider the need for remedial work of an intensive nature to enable the children with average and above average ability to realize their potential. In this particular study the number of children with average or above average I.Q. far exceeds the low ability group or the group of retarded learners.

A COMPARATIVE STUDY OF THE EFFECT OF TWO METHODS OF TEACHING PHONICS ON READING AND SPELLING ACHIEVEMENT IN GRADE ONE

Sister Devote Maria Hanrahan, O.P.

PROBLEM. The present comparative, experimental study was undertaken to discover if significant reading and spelling achievement will result from intensive drill with a specific method of phonics used as an adjunct to a particular basal reader as compared to the results from another basal reader with its phonics incorporated.

PROCEDURE. The present experimental and comparative study included 63 first-grade children in two parochial schools in two suburban towns in New England. The population was representative of an average socio-economic class. Both teachers employed in this experimental study were comparable as to their education and teaching experience. The initial program included an intelligence test, a spelling test, and a reading test. This was done to determine the status of each pupil in these areas; statistical procedures were then used to equate the two groups.

The experimental group was taught phonics following the suggestions and methods offered in the handbook, Breaking the Sound Barrier. The teacher of the Control group taught the phonic techniques incorporated in the basal readers used by her pupils. At the end of the experimental period which was six months, final tests were administered to measure the comparative gains made by the two groups in reading and in spelling.

FINDINGS. In view of the fact that the initial scores for the Experimental and Control groups were equivalent at the beginning of the experiment, a significant difference between the final achievement scores of the Experimental and Control groups would reveal the effect of the experimental factor used with the Experimental group, namely, a specific phonics method used as an adjunct to a particular basal reader.

The mean final reading score of the Experimental group was 3.35; that of the Control group was 3.07. The t-value of 2.00 was significant at the .05 level of confidence.

The mean final spelling score of the Experimental group was 3.33; that of the Control group was 2.58. The t-value of 5.76 was significant at the .01 level of confidence. This would seem to indicate that the experimental factor, a specific phonics method, had greater effect on spelling than on reading achievement.

SUMMARY AND CONCLUSIONS. Analysis of obtained data seems to justify the following conclusions:

1. Control group: The use of a particular series of basal readers with incorporated phonics instructions resulted in reading gains ranging from six to twenty-two months during the six months' experimental period. However, gains in spelling were not as notable.

2. Experimental group: Intensive drill with a specific method of phonics as an adjunct to the basal reader program yielded reading gains ranging from eight to twenty-one months during the six months' experimental period. Gains in spelling ranged from nine months to twenty-six months.

3. Evidence justified the conclusion that training in phonics according to the method used with the Experimental group was superior to the method used with the Control group for the improvement of spelling. However, the superiority of the experimental method over the control method was not established in reference to growth in reading achievement.

A SURVEY OF THE AVAILABLE FACILITIES FOR THE IMPROVEMENT OF READING IN LIBERAL ARTS COLLEGES FOR WOMEN ACCREDITED BY THE MIDDLE STATES ASSOCIATION OF COLLEGES AND SECONDARY SCHOOLS

Sister Lucina Joseph Hayes, C.S.J.

PROBLEM. The present study was undertaken to survey the facilities available for the improvement of reading in liberal arts colleges for women accredited by the Middle States Association of Colleges and Secondary Schools.

The investigation attempted to obtain information concerning the following questions:

1. What are the present practices and curriculum provisions regarding reading programs at the college level?

2. What is the present thinking among administrative personnel in regard to college level reading programs?

3. What are the provisions for remedial, developmental, and speed reading courses offered in liberal arts colleges for women in the Middle Atlantic states?

4. What specific areas of weakness in reading among the students have been recognized by administrators and/or faculty members?

5. What techniques and materials are utilized for reading improvement at college level?

6. What is the extent of reading-oriented enrichment facilities and honors program at the college level?

7. What provisions are made in class schedules for reading improvement classes or clinical assistance?

PROCEDURE. A review of related literature in a ten year retrospect revealed that in essence, a predetermined aim of college reading programs should be projected toward providing students with the reading and study skills necessary to facilitate effectiveness, efficiency, self-reliance, and intelligent participation in civic, religious, and social environments. Survey of the literature also provided valuable information concerning existing programs and practices, and the trends and thinking of specialists in the field of reading and allied disciplines.

A form letter and a detailed questionnaire designed as a check list were sent to the academic deans of each college included in the survey. The questionnaire stressed the type of program, the department responsible for its operation, the texts, mechanical aids, and other materials utilized. A section was added to elicit information relevant to the thinking of administrative personnel regarding the expediency of reading programs at the college level.

FINDINGS. 1. The inadequacy of present practices and curriculum provisions regarding reading programs in liberal arts colleges for women presents a problem to the student in need of specialized reading instruction in order to achieve academic success.

2. Diversified thinking among administrative personnel in regard to college level reading programs hinders the possibility of developing mature reading skills and habits among the students.

3. While developmental and speed courses are available in some instances, they are insufficient in number, and remedial courses are barely tolerated.

4. College administrators and faculty members acknowledged a weakness in critical reading ability to be quite prevalent. Logical reasoning would lead to the implication of the necessity for developing critical and interpretative skills, particularly at the college level, if education seeks to fulfill the objective of helping each individual to actuate his potential.

5. Both mechanical and non-mechanical teaching aids are used in college reading programs. There is a trend toward spending less time in using mechanical instruments.

6. A trend toward tightening admission qualifications was evident in liberal arts colleges admission policies, and a pattern of intellectual growth and development through enrichment facilities and reading of a cultural nature seemed to be growing in popularity.

7. The majority of colleges contacted seemed to favor off-campus clinical service or special tutoring. Arrangements for regularly scheduled classes in reading were found in only six of the colleges.

SUMMARY AND CONCLUSIONS. In full realization of the limitations of the study and with an awareness of the general need for developmental reading programs at the college level, the following recommendations are made:

1. That a replicative study should be done with a larger sampling of liberal arts colleges for women drawn from a number of geographical areas.

2. That a more systematic investigation be made of the reading instructional needs of students matriculating in liberal arts colleges for women.

3. That evaluative criteria for establishing reading programs in liberal arts colleges be developed and presented to college administrators and faculty members.

4. That intensive studies be made by faculty members to determine the extent to which facilities for the improvement of college reading can be logically included in the curricula.

5. That curriculum committies investigate areas of weakness in general reading achievement among the students and endeavor to present a possible solution.

6. That reading programs at the college level be stressed and integrated in the curricula as a goal toward self-improvement among students.

7. That college level reading programs be administered by personnel specifically trained for developing essential reading skills at college level.

AN EXPERIMENTAL STUDY OF THE EFFECT ON GENERAL READING COMPREHENSION OF A SYSTEMATIC AND INTENSIVE VOCABULARY APPROACH TO THE STUDY OF LITERATURE WITH STUDENTS IN GRADE TEN

Sister Mary Nicolas Hegarty, C.S.J.

PROBLEM. The purpose for which this investigation was undertaken was to ascertain the effect which an intensive and systematic vocabulary approach to the study of literature would produce on the reading ability of tenth-grade pupils.

Pertinent questions formulated were:

1. Will an intensive and systematic vocabulary approach to the study of literature affect the student's level of comprehension?

2. Will an intensive and systematic vocabulary approach to the study of literature affect the student's speed of comprehension?

3. Will an intensive and systematic vocabulary approach to the study of literature affect general vocabulary power?

PROCEDURE. The sample consisted of sixty-four students from the same parochial school system within the Archdiocese of Boston. One class of thirty-two pupils constituted the Experimental group, while an equal number from another class comprised the Control group.

The measurements utilized were the California Short-Form Test of Mental Maturity, 1957, Secondary Level; and Cooperative English Tests - Reading Comprehension, Form 2 A at the beginning of the study and Form 2 B at the conclusion.

Following the preliminary testing of both groups for mental age, vocabulary, speed of comprehension, and level of comprehension, the equivalency of the groups was established by application of the t-test formula. The chi-square technique applied to mental age scores indicated that the groups represented a normal distribution.

The experiment was conducted over a period of four months, the time allotment being 45 minutes daily. Students in both groups were engaged in a variety of guided and independent readings from the same literature anthology. In addition, the Experimental group used a word study booklet and a drill exercises and tests workbook based on this word study booklet. Both of these were prepared with the intention of stimulating full interpretation of the required reading selections in the anthology.

Determination of the range, mean, error of the mean, standard deviation, and error of the standard deviation for the population was made for all test results. Coefficients of correlation were computed to determine the significance of the difference between means of the same group on initial and final tests for all variables. Application of the Pearson Product-Moment correlation coefficient to find the degree of relationship which intensive vocabulary study bears to reading comprehension provided further data.

FINDINGS. Inter-group comparison showed the mean difference in vocabulary to be .93 in favor of the Control group; the mean difference in speed of comprehension to be .09 in favor of the Control group; the mean difference in level of comprehension was 1.49 in favor of the Experimental group. This latter difference was significant at the .05 level of confidence.

In reading vocabulary, both the Experimental and Control groups made significant gains. The mean differences between initial and final scores were significant at the .01 level of confidence for both groups. The correlation of .76 between the final and initial scores of the Experimental group showed a higher relationship between scores than did the Control group correlation of .66.

Mean differences between initial and final scores in speed of comprehension were significant at the .05 level of confidence both for the Experimental and Control groups. A correlation of .70 between the final and initial scores of the Control group showed a higher relationship between scores than did the Experimental group correlation of .56.

In level of reading comprehension, a mean difference of 1.04 between initial and final scores was obtained for the Experimental group. Though statistically insignificant, this difference is much greater than that of .05 found between initial and final scores of the Control group. The correlation of .50 between the initial and final scores of the Experimental group showed slightly higher relationship than did the Control group correlation of .46.

SUMMARY AND CONCLUSIONS. According to the findings, the following conclusions seem to be justified:

1. An intensive and systematic vocabulary approach to the study of literature greatly affected the reading level of comprehension of the participants as evidenced by test data.

2. An intensive and systematic vocabulary approach to the study of literature did not seem to affect speed of comprehension significantly. An over-analytical habit brought about by the systematic study of words, and consciousness of the fact that comprehension is the essence of reading may account for the lack of greater gain in speed of the Experimental group.

3. An intensive and systematic vocabulary approach to the study of literature did not significantly affect the general vocabulary power of the Experimental group over that of the Control group. The writer judged the reasons for no greater affect of training in vocabulary to be: a) the vocabulary test used contained only 60 words, the large majority of which were not included in the experimental study program; b) the sample population represented the lower section of a homogeneously-grouped grade divided into two classes, therefore, facility in detecting English derivatives from Latin and French words would not be expected as it might be from a brighter group.

A COMPARATIVE AND ANALYTICAL STUDY OF THE SPECIFIC DIFFERENCES IN SPELLING ACHIEVEMENT BETWEEN BOYS AND GIRLS AT THE ELEMENTARY SCHOOL LEVEL

Sister M. Theresita Jeannotte, S.C.M.M.

PROBLEM. The present study attempted, through analysis and comparison of the spelling achievement of boys and girls of grades five and eight to determine the difference, if any, in general competence between the two groups, Answers were sought to the following questions:

1. Are there more boys who are poor spellers than there are girls?

2. Are spelling errors consistent for girls, for boys, for both groups?

3. What is the relationship between reading and spelling achievement of boys and girls?

4. What is the relationship between mental ability and spelling?

5. What is the relationship between mental ability and reading achievement?

PROCEDURE. The study was conducted in four parochial schools in the Norwich diocese of eastern Connecticut. All the pupils in grade five and grade eight were included. There were 85 boys and 83 girls in the fifth grade and 71 boys and 71 girls in the eighth grade. The testing program, completed in October, 1962, included: the Otis Quick-Scoring Mental Ability Test, Form FM, the Wide Range Achievement Test in spelling, and the Gates Reading Survey Test, Form I.

The following statistical procedures were used to analyze test results: (1) the t-ratio for the significance of mean differences between boys and girls in spelling and reading achievement, (2) the Pearson Product-moment correlation for evaluation of the relationship of factors studied, (3) the percentage technique for analysis of spelling erros.

FINDINGS. 1. In grade five, approximately 27 per cent of the boys and 25 per cent of the girls were retarded in spelling. Amount of retardation ranged from one month to three years. Among the retardates were individuals with intelligence quotients as high as 114 who were achieving below grade level. In grade eight, 56 per cent of the boys and 36 per cent of the girls were retarded in spelling. Amount of retardation ranged from one month to three years. Among these pupils were some with intelligence quotients as high as 124.

2. Of the 57 words dictated to fifth-grade pupils, only five words were correctly spelled by all of the boys and only 13 words were correctly spelled by all of the girls. Boys and girls were comparable in the number misspelling specific words and in the variety of misspellings given.

Of the 83 words dictated to eighth-grade pupils, only 11 were correctly spelled by all of the boys and only 14 were correctly spelled by all of the girls. Boys and girls were comparable in the number of errors made, but more boys than girls made errors on specific words.

3. Coefficients of correlation between reading and spelling achievement were found to be: .71 ± .05 for fifth-grade boys, .51 ± .08 for fifth-grade girls, .56 ± .08 for eighth-grade boys, and .63 ± .07 for eighth-grade girls.

4. Coefficients of correlation between spelling achievement and mental age were found to be .41 ± .09 for fifth-grade boys, .44 ± .09 for fifth-grade girls, .43 ± .10 for eighth-grade boys, and .45 ± .10 for eighth-grade girls.

5. Coefficients of correlation between reading achievement and mental age were found to be: .63 ± .07 for fifth-grade boys, .60 ± .07 for fifth-grade girls, .58 ± .08 for eighth-grade boys, and .76 ± .09 for eighth-grade girls.

SUMMARY AND CONCLUSIONS. The serious retardation in spelling of boys and girls in grades five and eight requires greater preventive measures and assistance by teachers to reduce the degree and extent of spelling retardation among eighth-grade pupils. Since more boys than girls were found retarded in spelling, it would seem that greater attention from the teacher would be needed with the boys to prevent serious retardation.

THE EFFECT OF DIRECTED READING ACTIVITIES IN THE STUDY OF GEOGRAPHY IN GRADE FOUR

Georgina Mary Bennett Kiely

PROBLEM. The purpose for which this study was undertaken was to make a comparison of the results accruing from two methods of teaching geography, namely, teaching geography by means of the directed reading activities program and teaching geography as outlined in a school curriculum guide which does not stress reading. From this study could be determined the importance of reading in connection with the study of a content subject.

Specific questions formulated were:

1. Will the use of directed reading activities in the teaching of geography to fourth-grade pupils effect greater growth in knowledge than does the teaching of geography by the curriculum outlined program?

2. Will the use of directed reading activities in the teaching of geography effect growth in reading achievement of fourth-grade pupils?

3. Would such a program affect the attitude of pupils toward the study of geography?

PROCEDURE. The population consisted of 38 fourth-grade pupils from two schools within a school district in Somerville, Massachusetts. One class of nineteen pupils constituted the Experimental group, while an equal number from another comprised the Control group.

Following the preliminary testing of both groups for chronological age, mental age, I.Q., reading achievement and geography achievement, the equivalency of the groups was established by application of the t-test formula. The chi-square technique applied to I.Q. scores indicated the groups to be representative of a normal distribution.

This experiment was conducted for a period of five months. Both the Experimental and Control groups involved in the study devoted 45 minutes daily to the study of geography. The same basic text was used by both groups. The Control group followed the local course of study as its instructional guide. The Experimental group was taught by the writer while the Control group was taught by a teacher with similar education and teaching experience.

In the experimental program each unit of study and all lessons within a unit were based on a directed reading activities approach and were therefore organized to include: (1) preparation for the lesson; (2) guided silent-oral reading; (3) rereading; (4) follow-up activities.

To detect the effectiveness of the experimental factor upon the learning of geography, the final achievement scores on standardized geography and reading tests and on the constructed geography test were analyzed.

The measurements used were the *Gates Reading Survey Test*, the *National Geography Achievement Test*, and the *Constructed Geography* Test. Alternate forms of each test supplied information pertinent to degree of growth from initial to final testing.

FINDINGS. 1. The mean difference between the final raw scores of the Experimental and Control groups on the constructed geography test was great, since the mean score of the Experimental group was 86.67 and that for the Control group was 65.46 resulting in a difference of 21.21 in favor of the Experimental group. The t-value was found to be 6.202, significant at the .001 level of confidence.

2. The mean scores on the *National Geography Achievement Test* were 5.65 and 4.46 respectively for the Experimental and Control groups. The mean difference was 1.19, yielding a t-ratio of 4.407 in favor of the Experimental group, highly significant at the .001 level of confidence.

3. When comparing the final achievement grade scores in

reading, the mean difference between the Experimental and Control groups was .48 in favor of the Experimental group. This difference, however, was not statistically significant.

SUMMARY AND CONCLUSIONS. Results obtained during this experimental study would seem to justify the following conclusions:

1. The teaching of geography by means of the directed reading activities program greatly increased growth in the knowledge of geography of fourth-grade pupils as measured by results obtained on constructed and standardized geography tests.

2. The use of the directed reading activities program in connection with the teaching of geography did promote greater growth in reading skills than did the non-use of reading in connection with the teaching of geography.

3. The directed reading activities approach to the study of geography had a very positive and beneficial effect on the attitude of the pupils toward the study of geography.

AN INQUIRY INTO THE PROVISIONS FOR READING GROWTH OF STUDENTS IN THE VOCATIONAL SCHOOLS OF WISCONSIN

Genevieve C. Klevickis

PROBLEM. Increasing demands on Vocational, Technical and Adult Education in the United States to supply millions of young workers for the expanding labor forces in a technological society led the writer to study the provisions for reading growth in Vocational, Technical and Adult Education Schools in Wisconsin.

This study was limited to the survey of reading growth in a total of 41 schools, 17 of which support a post-high school terminal technical program with possibilities of concentration in twelve general fields of study and which terminate with an associate degree of no degree; and 24 compulsory education programs which are concerned primarily with providing occupational skill courses and academic courses to students who are under eighteen years of age.

This study attempted to answer questions related to administrative and instructor attitudes toward reading, professional improvement, evaluation, and successful reading approaches in Communication and Reading classes.

PROCEDURE. In order to make an appraisal of the Wisconsin Technical and Vocational programs, the questionnaire technique was used. Part I of the questionnaire was designed to elicit information appropriate to and within the province of the administrator. Part II was planned to include information from the technical directors of the schools. Part III was directed to the Communications instructor and was concerned with questions pertinent to classroom organization, goals, emphasis, and outcomes. Part IV was directed to the Reading teachers and asked for opinions related to reading techniques.

Usable responses were received from 90 per cent of the technical type of school and from 66 per cent of the compulsory education schools.

FINDINGS. In general the results of the study indicate much variation in the different schools but a rather general trend toward expansion of facilities for reading. This was evident in the three different types of vocational schools studied and in the responses from administrators, communications instructors, and reading instructors.

Findings from the administrators' questionnaire included:

1. There was a wide range both in the number of teachers employed in the Communications area and in the number of enrollees in such courses.

2. The preparation of instructors varied, but there was a consensus of opinion that a minimum of six credits in Communications and a course in reading were necessary as preparation.

3. The admissions policy of the schools varied from an "open door policy" to careful scrutiny of student performance standardized tests.

4. Strong trends toward expanded and centralized library facilities and a more liberal circulation policy were noted.

Findings from the responses of communications instructors were:

1. Recognition of the need for adequate professional preparation was attested by the fact that 38 per cent of these instructors held the Master's degree and 30 per cent were pursuing higher studies. It was also supported by reported attendance at in-service workshops.

2. The recreational reading of these instructors compared favorably to that of teachers in general. The majority spent 10 or more hours weekly in this type of reading.

3. Communications instructors gave definite impetus to growth in reading on the part of their students, recognized the areas in which these students required remedial help, grouped students according to their needs, and organized and chaired in-service meetings for reading improvement.

Findings from data submitted by reading instructors included:

1. Reading Instructors were generally well-prepared inasmuch as a graduate degree was held by two-thirds of those teaching in the associate degree program, by one-third in the non-degree program, and by one-fourth of those in the compulsory education program.

2. Although three-fourths of the respondees indicated attendance at in-service workshops, only one-third of these workshops were devoted to reading.

3. Reading instructors were asked to teach a variety of courses ranging from reading and communications courses to shop courses.

4. The frequency of class meetings, class time, class size, and structure of the program were favorable to reading instruction.

5. Formal appraisal methods were utilized by 40 per cent of the teachers while the remainder restricted appraisal to informal techniques. The usual gain per semester was approximately six months, but there were some students who gained two or more years in reading achievement.

6. Responses concerning reading skills taught indicated that there was proper balance in instruction, generally.

7. Indifference to reading on the part of students taking remedial work was reported by half the respondents in this group of teachers.

8. The most frequently mentioned level at which reading probelms had originated among students was third grade level.

SUMMARY AND CONCLUSIONS. In view of the trend toward a broad general education as a base for technical education of the findings of this study the following recommendations are presented:

1. There is a need for greater awareness of the necessity for a broad educational background with specialization in reading as the appropriate professional preparation for Communications and Reading instructors.

2. Efforts should be made by administrators to raise the standards of professional preparation of Communications and Reading instructors. The standards of the International Reading Association are suggested as suitable criteria for such instructors.

3. Cooperation with the entire faculty for the improvement of and interest in the reading progress of students is advocated.

4. At least one reading workshop should be arranged by Communications instructors or Reading teachers at the local level during an academic year.

5. To stimulate reading interests, an "interest reading" period at least once weekly is suggested.

6. Library trips and activities involving reading research are also advocated as a means of stimulating interest in books.

7. Administrators and faculty members should become acutely aware of the need for education in Communications and in particular in Reading.

AN APPRAISAL OF READING DIFFICULTIES EVIDENCED BY THIRD GRADE CHILDREN IN LOW READING GROUPS

Sister Antoine Marie La Porte, C.S.J.

PROBLEM. The purpose of this appraisal was to determine the particular difficulties of third-grade children in low reading groups. The transition from the primary to the intermediate department appears to be a crucial point in the life of a third grader. More of the content fields are added to their daily schedule which in turn means mastery of previous skills, if future achievement is expected. Among these skills, word recognition plays an essential part. It was in the light of this significant facet of word recognition that this study was undertaken.

Five specific questions were formulated in the attempt to ascertain reading difficulties:

1. Are there differences on test items consistently showing patterns of high and low scores?
2. Which areas tested appear to be consistently easy?
3. Which areas tested appear to be consistently difficult?
4. What types of errors were found?
5. How do the grade ratings on the various tests compare for this group of handicapped readers?

PROCEDURE. Three schools in Chicago and ten in the surrounding suburbs were selected. Two hundred ten children from low reading groups were given diagnostic and word recognition tests.

The ages ranged from 7-9 to 10-5 years, with a mean age of 8.5 years. The intelligence quotients ranged from 75 to 129 with a mean of 101.89. These intelligence quotients were obtained from the school files of the various schools under this testing program.

The Silent Reading Diagnostic Tests and the Wide Range

Achievement Test were used to reveal some of the reading difficulties in word recognition.

FINDINGS. The results of this study indicated the following observations:

1. The greatest areas of weakness were in recognition of words in context, and in noting phonetic and visual elements within the word (locating root words and initial sounds).

2. The second greatest area of weakness was visual recognition of syllables within words.

3. An over-emphasis was apparent in learning sounds in isolation.

4. Pupils showed general weakness rather than great variation in particular aspects of word recognition. However, variations sufficient to warrant attention were noted.

5. Children found unaided recognition and analysis of words most difficult.

SUMMARY AND CONCLUSIONS. 1. An intensive overall program of instruction would be warranted to strengthen skills. However, it must be remembered that some of the children would rank below level in ability, and, therefore, would not come under this program of intensive instruction but rather be taught according to their rate of learning.

2. Much more time needs to be given both to discrimination and noting phonetic and visual elements within the words with less stress on teaching isolated sounds. The children who find the learning to read process difficult also find particular trouble on perceptual aspects. Therefore, they require greater attention.

3. Exercises in using context clues and encouraging the use of context clues when encountering unfamiliar words in reading are needed.

AN EXPERIMENTAL STUDY OF THE EFFECT OF WEEKLY READING OF PERIODICALS ON GROWTH IN READING OF GRADE ONE PUPILS

Sister Mary Constantine Lee, C.S.J.

PROBLEM. The purpose for which this study was initiated was to discover the extent to which guided supplementary reading of weekly periodicals can influence reading comprehension and general reading achievement of grade one pupils.

Specific questions formulated were:

1. Will the use and study of periodicals foster the comprehension of paragraphs and stories as measured by standardized tests?

2. Will the use and study of periodicals significantly increase total reading achievement of first grade pupils as measured by standardized tests?

3. Will the systematic use of periodicals during school time foster a greater interest in and love of leisure-time and independent reading?

4. Will the use of periodicals in connection with reading instruction increase the children's desire to learn or to acquire more knowledge?

PROCEDURE. The sample involved in this experiment consisted of 91 first-grade pupils from two parochial schools in the Archdiocese of Boston. The 45 pupils constituting the Experimental group were taught by the investigator, while the 46 pupils comprising the Control group were taught by their regular classroom teacher.

Prior to the experimental periods, the Otis Quick-Scoring Test of Mental Ability and the Gates Primary Reading Tests were administered in order to determine mental ages and total reading ability of all pupils. At the close of the experiment, an alternate form of the Gates Primary Reading Tests was administered.

In order to promote skill in comprehension the writer constructed weekly comprehension checks based on the contents of the periodical used. The experiences of the teachers, the basal readers used, and the time allotment designated were constant for both groups. The use of weekly reading periodicals was the experimental factor introduced to the pupils of the experimental group.

FINDINGS. 1. The statistical data gathered in this investigation evidenced that the experimental and control groups were equivalent with reference to mental ages and initial reading achievement.

2. At the close of the experiment the mean difference in paragraph comprehension was .36 in favor of the experimental group, yielding a t-ratio of 2.57, significant at the .02 level of confidence.

3. In total reading achievement the mean difference was .48 in favor of the experimental group, yielding a t-ratio of 4.00, significant at the .001 level of confidence.

4. The average gain made by the experimental group was 1.33 in paragraph comprehension and 1.29 in total reading achievement, while the average gain of the control group was .81 in paragraph comprehension and .76 in total reading achievement.

SUMMARY AND CONCLUSIONS. 1. The use of children's periodicals such as Our Little Messenger and My Weekly Reader in a first grade reading program significantly increased comprehension of paragraphs as measured by standardized tests.

2. The use of periodicals in the first grade significantly increased total reading achievement.

3. The systematic use of children's periodicals during school time fostered a greater interest in and love of leisure time, independent reading, as shown by the eagerness of the children to read the periodicals used in this experiment.

4. The use of periodicals in connection with reading instruction increased the children's desire to gather more knowledge as shown by their discussions and their use of the information gleaned from their independent reading of My Weekly Reader.

AN EXPERIMENTAL STUDY OF THE EFFECT OF GROUPING ON THE ECONOMY OF LEARNING EIGHTH-GRADE LITERATURE

Sister Mary Terence McInnis, C.S.J.

PROBLEM. The purpose of this study was to determine the effect of grouping on the economy of learning eighth-grade literature. Specific questions that this study sought to answer were:

1. In what aspects of reading development do eighth-grade students exhibit the greatest competency as a result of flexible grouping?

2. Is there reading growth as a result of specific instruction in reading for detail, skimming, grouping ideas, finding the central theme, drawing logical inferences, interpreting poetry, and developing vocabulary?

PROCEDURE. The subjects of this experiment were 100 students in two eighth-grade classes in the same parochial school in the Boston Archdiocese. The groups were comparable in mental age, chronological age, total reading grade score, reading vocabulary, and reading comprehension. These variables were measured by the California Test of Mental Maturity, Junior High Level, and the SRA Achievement Series: Reading, Form A.

The teacher of the Control group taught the same literature program as the teacher of the Experimental group. The Control group worked on a whole-class instruction basis while the Experimental group worked under various conditions including whole-class activity, team learning, ability groups, and individual study.

The experimental period continued from September, 1961 to February, 1962 with a daily lesson of 45 minutes. The Control group used Prose and Poetry Adventures and Be a Better Reader. The Experimental group used the same two books and Developing Your Vocabulary, How to Be a Better Student, A Vocabulary Builder Book Four, Modern Reading, and three of the SRA Reading Laboratory kits.

At the close of the experimental period the SRA Achievement Series: Reading, Form B was administered to both groups.

FINDINGS. 1. Comparison of initial and final reading scores of the experimental group showed mean gains to be significant at the .001 level of confidence in reading vocabulary, reading comprehension, and total reading.

2. Comparison of initial and final reading scores of the control group showed mean gains to be significant at the .01 level of confidence in reading vocabulary, and in total reading. The gain in reading comprehension was statistically insignificant.

SUMMARY AND CONCLUSIONS. Analysis of data obtained during the experiment would seem to justify the following conclusions:

1. As a result of flexible grouping, the Experimental group of eighth-grade students in this study exhibited highly significant gains in reading vocabulary, reading comprehension, and total reading.

2. The fact that the Control group failed to make a significant gain in reading comprehension suggests that it is in this aspect of reading achievement that flexible grouping may have the greatest effect.

3. Reading growth was evident in both groups in reading for detail, skimming, grouping ideas, finding the central theme, drawing logical inferences, interpreting poetry, and developing vocabulary.

A STUDY OF FACTORS RELATED TO THE LEARNING OF SPELLING

John George Murray, Jr.

PROBLEM. The purpose of the present study was to examine by means of intercorrelation the factors related to the learning of spelling and to isolate those factors which are most highly correlated with spelling ability. Since the results of spelling achievement are disappointing, a study of the factors related to the learning of spelling may help in preventing spelling retardation.

PROCEDURE. Standardized tests were administered to 100 eleventh-grade boys and girls for the purpose of measuring mental age, and ability for: spelling, reading, and motor coordination. The remaining variables: auditory discrimination, imagery, memory, rules of spelling, syllabication, pronunciation, and visual perception were measured by tests constructed by the author.

The obtained test data were statistically treated by means of correlation coefficients, beta coefficients, and multiple correlations to arrive at the contribution of various factors, singly and totally, to spelling achievement.

The solution of the multiple correlation problem by the Doolittle Method, with eleven independent variables, and spelling, the dependent variable, yielded four coefficients of determination having negative values. For this reason, these four factors: mental age, memory, visual perception, and motor coordination were eliminated, and a new solution of the multiple correlation problem with the remaining seven independent variables was undertaken.

FINDINGS. The factors that correlated most highly with spelling achievement were respectively:

1. Rate of Reading, w.p.m.	.540 ± .07
2. Auditory Discrimination	.530 ± .07
3. Syllabication	.520 ± .07
4. Pronunciation	.480 ± .08
5. Rules of Spelling	.450 ± .08

The highest intercorrelations of the various factors considered in the study were found to be respectively between:

1. Mental Age and Total Reading	r = .768 ± .04
2. Rate of Reading and Total Reading	r = .763 ± .04
3. Mental Age and Rate of Reading	r = .690 ± .05
4. Rules of Spelling and Rate of Reading	r = .615 ± .06
5. Mental Age and Auditory Discrimination	r = .576 ± .07
6. Rate of Reading and Motor Coordination	r = .527 ± .07

A total variance of 53 per cent for spelling achievement was accounted for by the contributions of the following various factors:

1. Syllabication	17%
2. Rate of Reading w.p.m.	14%
3. Auditory Discrimination	12%
4. Pronunciation	8%
5. Total Reading	2%
6. Rules of Spelling	1%
7. Imagery	.01%

SUMMARY AND CONCLUSIONS. The following conclusions seem warranted under the conditions of the present study.

1. The factors most highly correlated with the learning of spelling are rate of reading, auditory discrimination, syllabication, pronunciation, and knowledge of rules of spelling.

2. The factors least highly correlated with the learning spelling are mental age, imagery, memory, motor coordination, and visual perception.

3. The highest intercorrelation between factors considered in this study was obtained between mental age and total reading.

4. Syllabication contributed more toward variance in spelling achievement than any of the other factors studied.

THE RELATIONSHIP OF KNOWLEDGE OF GRAMMAR AND USAGE TO READING IMPROVEMENT OF FIFTH GRADE PUPILS

Ann F. O'Leary

PROBLEM. The purpose of this study was to determine whether or not an intensive program of instruction in English grammar and usage would improve the reading achievement of fifth-grade pupils, and to ascertain the relationship, if any, between knowledge and usage of English and success in reading.

PROCEDURE. In order to obtain adequate data for this study, a testing program was inaugurated during the first week in October, 1962, prior to the experimental program. Fifty-four students, who constituted the experimental and control groups involved in the study, were given the Kuhlmann-Anderson Intelligence Test, Battery E and the Metropolitan Achievement Tests, Intermediate Battery, Word Knowledge, Reading, and Language sections.

The sample was found to approximate a normal distribution as evidenced by the Chi-square test applied to mental ages. The experimental and control groups were found to be comparable in mental ages and in initial reading and language scores.

Both groups received 35 minutes of language instruction daily and 75 minutes of reading instruction four times weekly. During the language period the experimental group received intensive instruction in correct usage, parts of speech, punctuation, capitalization, and the study of phrases and sentences. The control group followed the course of study for fifth grades in the Somerville, Massachusetts School System. This latter course of study was not as inclusive or intensive as the course given to the experimental group. The same language textbook was used by both groups. In addition, the experimental group was given language instruction gleaned from many sources by the writer.

Final tests were administered during the last week in January, 1963 in order to study the gains in reading and language made during the experimental period.

FINDINGS. 1. The mean difference between the experimental and control groups in gain in word knowledge favored the experimental group. A t-ratio of 2.44 was obtained, which was significant at the .05 level of confidence.

2. The mean difference for gains in reading comprehension favored the experimental group. The difference was statistically insignificant, however.

3. The mean difference for gains in total reading favored the experimental group. The difference was statistically insignificant.

4. The mean difference between gains in language favored the experimental group. A t-ratio of 7.66 was obtained, which was significant at the .001 level of confidence.

SUMMARY AND CONCLUSIONS. Analysis of data obtained in this experimental study would seem to warrant the following conclusions:

1. The intensive program of instruction in English grammar and usage resulted in greater gains in total reading achievement for the experimental group than for the control group.

2. Intensive training in grammar and usage did not significantly affect growth in reading comprehension.

3. Intensive training in grammar and usage significantly promoted growth in reading vocabulary of fifth-grade pupils.

4. The relationship between reading achievement and language achievement was substantial for the experimental group. There was a high correlation between these variables for the control group. The change in correlation coefficient from .68 to .55 for the experimental group indicated that in their growth in reading, the pupils changed rank order, whereas the control group members maintained approximately the same rank order throughout the experimental period.

AN INVESTIGATION OF THE READING STATUS OF EMOTIONALLY DISTURBED DELINQUENT BOYS UPON ADMISSION TO A RESIDENTIAL REHABILITATION CENTER

Sister Mary Yvonne Therese Peiffer, O.S.F.

PROBLEM. The aim of the investigation was to examine the reading status of a number of delinquent boys upon their admission to a residential rehabilitation center, with the intention of discovering characteristic reading growth patterns and reading problems peculiar to delinquent boys. It was hoped thereby to facilitate prompt and efficient remediation of the difficulty in the individual classrooms or the Remedial Department of the Hanna Boys Center.

PROCEDURE. A Reading Status Inventory intended primarily to meet the unique needs of the reading specialist at Hanna Center was constructed for use in this investigation. In the formulation of the Reading Status Inventory the principles of diagnosis set forth by Bond and Tinker[1] were used as a guideline in determining the essential factors to be included and the methods of diagnosis to be employed.

Mental ability was determined on the Stanford-Binet Intelligence Scale. Reading status was ascertained through the administration of the Gates Reading Survey and the Gates Reading Diagnosis. An adaptation of Remmers' "Test of Attitude for Any School Subject" was used to determine attitude toward reading. Interests were measured on the Interest Inventory devised by the examiner. Scores were plotted on the Reading Status Scale constructed for this investigation.

Thirty delinquent boys between the ages of 10-9 and 16-3 comprised the population of the study. Reading tests were administered within three weeks after the subject's admission to Hanna Center; the intelligence scale after signs of initial adjustment were evidenced. All scores were converted to grade-age scores for recording on the Reading Status Scale.

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[1] Bond, Guy L., and Tinker, Miles A. Reading Difficulties, Their Diagnosis and Correction. New York: Appleton-Century-Crofts, Inc., 1955.

FINDINGS. Several generalizations were formulated from the wide variations in reading patterns which emerged from a composite study of the 30 scales.

1. There was generally a greater retardation in skills than was evidenced from the retardation formula: Reading Expectancy Score[2] - Gates Reading Survey average grade score.

2. There was a greater amount of retardation in auditory discrimination skills than in visual perception techniques, indicating the presence of emotional factors in the subjects investigated.

3. A significant degree of difficulty with letter sounds was disclosed. Inability to recognize, blend, or reproduce letter sounds was frequent.

4. Higher scores were ordinarily obtained in rate of silent reading and accuracy of silent reading than in the comparable oral rate and accuracy tests.

5. Wide variation existed among the three vocabulary tests with no definitive pattern emerging.

6. The group as a whole expressed a favorable attitude toward reading.

7. Moderate negative correlation (-.50) was found between length of delinquency and amount of reading retardation.

SUMMARY AND CONCLUSIONS. The results of this study reemphasize the indispensability of reading diagnosis in planning a reading curriculum for the delinquent boy. Knowledge of specific weaknesses in reading skills, immaturity of reading interests and attitude toward reading, which can be so easily overlooked in a general reading survey, is a prerequisite to efficacious remediation of reading inadequacies.

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[2] (Years in School x I.Q.) + 1.0 = Reading Expectancy. See Bond and Tinker, op. cit., p. 79.

A DIAGNOSTIC SURVEY OF SPECIFIC READING DIFFICULTIES IN THE FOURTH GRADE OF A PUBLIC ELEMENTARY SCHOOL IN MILWAUKEE COUNTY, WISCONSIN

Mildred B. Pratt

PROBLEM. The problem of this study was to determine the amount and the specific kinds of reading disabilities existing among the pupils in the fourth grade in a Milwaukee County elementary school. Secondary to this problem was that of ascertaining efficient tools of appraisal of specific reading deficiencies.

The specific objectives in this study were to determine:

1. Which children are reading up to intellectual capacity?

2. What is the extent of retardation in reading when compared with intellectual capacity?

3. What are their instructional and independent reading levels?

4. What are the specific difficulties experienced by these children?

5. What are the skill deficiencies in: a) word recognition, b) oral reading, c) comprehension skills, d) reading study skills?

PROCEDURE. Although this study included only twenty-four pupils in the fourth grade, there was widespread variation in ages, test scores, and instructional levels. Chronological ages ranged from 9-3 to 12-1; mental ages from 8-5 to 13-2; the intelligence quotients from 75 to 120, and the listening comprehension test exhibited a spread of more than six years. In the achievement tests the vocabulary scores included a range of almost five years and the comprehension range exceeded four years. The reading instructional levels ranged from grade levels of 1.9 to 7.8 which necessitated teaching at many levels.

The six standardized tests used in this study were the following: the Otis Quick-Scoring Mental Abilities Test, Beta Form to measure intelligence; the Durrell-Sullivan Reading Capacity Test to ascertain listening comprehension; the Wide Range Achievement Test, the Iowa Tests of Basic Skills, the Bond-Clymer-Hoyt Developmental Reading Test, and the Bond-Clymer-Hoyt Silent Reading Diagnostic Test to measure achievement. These tests were administered and scored according to the directions given in the manuals. The ceiling of the Bond Diagnostic Test was too low for good readers. Therefore, it was necessary to interpolate grade placements on some sections of this test for a number of the pupils in this study.

Because standardized tests do not establish the reading levels of the pupils or determine the types of errors they make in oral reading, the Informal Reading Inventory was administered. Pupils read selections from the Betts Readers while errors in oral reading, answers to comprehension questions, and rate of reading were recorded.

The inventory was administered individually and was begun at least one year lower than the children achieved on standardized tests. The independent level was established at the highest level at which the child read orally without exhibiting symptoms of difficulty, with 99% accuracy in pronunciation, and at least a 90% comprehension score. The level at which there was freedom from tension, 95% accuracy in pronunciation, and a minimum comprehension score of 75% was confirmed as the instructional level. At the frustration level the child was unable to pronounce at least 10% of the running words; he was unable to comprehend at least 75% of what he read; and he manifested symptoms of difficulty such as increased tension, frequent errors, repetitions and slow word-by-word reading.

After the tests had been administered and scored, the reading expectancy grade was established for each pupil. The estimated reading expectancies were computed by the formula: Years in school x I.Q. + 1.0 = Expected Reading Grade.

FINDINGS. The findings indicate a wide range of reading levels for each individual child and among the pupils in the classroom as well as variation in skills for each individual child. They also disclose distinct variation in the different standardized test scores of the pupils.

In general the pupils who exhibited difficulty in mechanics also were deficient in comprehension. Both great retardations and lesser retardations were shown in general reading power, word recognition skills, and specific comprehension and work study skills. Good readers and retarded readers were found to have deficiencies in one or more factors in reading.

An examination of data indicated a wide spread of scores in general reading power. Although the means of these tests show very slight retardation, a closer study of individual achievement reveals that more children tested below their expectancy than above it.

Great discrepancies existed between listening comprehension and general comprehension as well as specific comprehension skills. A larger group was retarded in listening comprehension than in listening vocabulary. A minimal amount of variation was found between the means of the various comprehension skills evaluated in this study.

In this area of word recognition pupils scored higher on the oral tests of recognizing words in isolation than on the silent test. For the group as a whole, marked retardation was evident in recognition of words in context. More errors were made on orientation and the beginning letters of words than on the middle and ending letters of words. Scores attained on recognition techniques by visual analysis were higher than those of phonetic knowledge. Definite retardation was found in word synthesis. Repetitions of words and phrases accounted for the greatest number of errors in oral reading.

SUMMARY AND CONCLUSIONS. Within the limitations of this study the following conclusions appear to be valid:

1. A wide range of scores was exhibited in general reading power, vocabulary, general reading comprehension, specific comprehension skills, and word recognition skills.

2. Substantial differences were noted between listening vocabulary and comprehension and reading vocabulary and comprehension.

3. In an analysis of the errors made in word recognition, the tendency to reverse words in a contextual situation was disclosed. Other visual habits revealed were the failure to examine carefully the initial parts of words and the middle parts of words. The recognition pattern indicated that the pupils in this study were more attentive to the endings of words than to the beginnings or middles of words.

4. The recognition pattern also revealed some degree of proficiency in the actual pronunciation of words in isolation but showed a definite deficiency in the ability of use context clues.

5. Pupils exhibited a definite deficiency in some phases of auditory discrimination with less retardation in visual analysis of words. A definite retardation in word synthesis ability was also shown.

6. This study substantiates the opinion that there is a very definite variation not only in reading levels but also in specific skills among children within a grade and within the individual child.

A STUDY OF THE SUMMER VACATION RETENTION OF READING FUNDAMENTALS IN CHILDREN ENTERING GRADE TWO

Sister Mary Ann Terese Reznicek, C.S.J.

PROBLEM. The present study was undertaken in order to obtain information regarding the incidence, extent, and type of reading losses or gains occurring among beginning second-grade children following the summer vacation. In accordance with this purpose, the investigation took into account the following specific objectives: (1) to discover whether there is any statistically significant difference in the summer vacation retention of children with varied mental ability, (2) to determine whether there is any statistically significant difference in the summer vacation retention of children with varied reading power, (3) to study the influence of various amounts of reading activity during the summer vacation on the retention of reading skills.

PROCEDURE. A total of 234 children from eight first-grade classes in five parochial schools in the Chicago suburban area was employed in the study. The Developmental Reading Tests Form 1A, were administered to these children during the last week of May and again during the second week in September in order to determine the existence, extent and type of reading losses or gains occurring over the summer vacation. The Otis Quick-Scoring Mental Ability, Alpha Test, Short Form, was administered in October to classify the children into groups of varied mental ability and thus make possible more complete and meaningful comparisons.

A letter and questionnaire were sent to the parents of each child in the study regarding the amount and type of reading activity in which the child might have been engaged during the vacation period. The data obtained from the questionnaire and tests were recorded and analyzed. A study was then made of the group as a whole and of the various subgroups formed on the basis of mental ability, reading power, and participation in summer reading. The direct difference method was employed in determining whether losses or gains for the various groups were statistically significant.

FINDINGS. Analysis of the data gathered in the study resulted in the findings reported below:

1. Regarding the group as a whole, the children suffered significant losses in all areas measured by the reading test following the summer vacation.

2. Considering the group from the standpoint of mental ability: (a) the upper 27 per cent showed no significant loss except in General Comprehension, (b) the middle 46 per cent experienced losses in all areas except Basic Vocabulary, (c) the lower 27 per cent suffered highly significant losses in all areas covered by the test.

3. Considering the group from the aspect of reading power: (a) the upper 27 per cent incurred significant losses in both General Comprehension and Average Reading, (b) the middle 46 per cent experienced significant losses in all areas except Basic Vocabulary, (c) the lower 27 per cent experienced significant losses in all areas covered by the test.

4. Considering the group in regard to participation in summer reading activity:

Those children who did no reading whatever during the summer suffered highly significant losses in all areas measured by the test.

Those children who did a limited amount of reading during the summer, less than ten books, showed significant losses in all areas except Basic Vocabulary.

Those children who did a large amount of reading during the summer, ten books or more, experienced no significant loss in any area except General Comprehension.

5. Data indicated that retention in General Comprehension was most affected, while retention in Basic Vocabulary suffered least as a result of the summer vaction period.

6. Summer reading activity appeared to help prevent serious losses in reading achievement.

SUMMARY AND CONCLUSIONS. On the basis of the above findings, the following conclusions appear to be justified:

1. Since the data obtained in this investigation revealed significant losses in reading skills following the vacation interval for the group as a whole, the subject of vacation loss ought to be given due consideration by primary grade teachers.

2. The evidence of comparatively frequent extreme losses, especially in the case of superior readers, might suggest that skills were too quickly presented and not adequately mastered. Hence, teachers ought to guard against superficial teaching of reading fundamentals.

3. Inasmuch as the scores of children who read considerably during the summer showed substantially greater retention than those who read less or not at all, teachers ought to take more positive steps in encouraging and organizing summer reading activities, so as to reduce vacation losses to a minimum.

4. Parents also ought to be made aware of the extent of vacation losses and be directed in the type of summer reading activities which would be profitable to their children.

5. Second grade teachers and pupils alike might benefit from some type of reading test in early September in order that they may determine which pupils need more specific attention in overcoming vacation losses and in reviving previously developed skills.

A PARALLEL EXPERIMENTAL STUDY OF IMPROVEMENT OF SPELLING AND READING ACHIEVEMENT OF SECOND GRADE PUPILS WITH TWO SPECIFIC METHODS IN PHONETIC AND STRUCTURAL WORD ANALYSIS

Sister Mary Bernard Rivest, S.C.M.M.

PROBLEM. This experimental study was undertaken to determine which of two methods of teaching phonics produces greater achievement in spelling and in reading, namely, Phonics Turnpike to Reading or the Scott, Foresman basal reader phonetic program. The investigation was conducted as an attempt to discover answers to the following questions:

1. Will phonics taught according to an independent method produce greater gains in spelling achievement of second-grade pupils than phonics taught according to a basal reader method?
2. Will phonics taught according to an independent method produce greater gains in reading achievement of second-grade pupils than phonics taught according to a basal reader method?
3. Will there be a significant difference between the experimental and control group in rate of reading?

PROCEDURE. The present experimental study included 100 second-grade pupils of four parochial schools in the Norwich, Connecticut diocese. The children were of varied intelligence and were from families of low and average socio-economic status.

The initial testing program was inaugurated in October, 1962. Tests administered included Kuhlmann-Anderson Mental Ability Test, Diagnostic Test of Word Analysis Skills, Scholastic Diagnostic Reading Test, and the Wide Range Achievement Test. Groups were equated on the bases of these test results.

Phonics Turnpike to Reading was the phonics method used with the experimental group, while the control group received phonic instruction from the Scott, Foresman basal reader program. The amount of time devoted to reading and phonics instruction was equal in both groups. At the close of the fifteen-week experimental period, tests were administered to both groups to compare gains made in spelling and in reading achievement.

FINDINGS. 1. In spelling achievement, the mean difference favored the experimental group. A t-ratio of 3.72 was obtained, which was significant at the .001 level of confidence.

2. The mean difference in total reading achievement favored the experimental group. A t-ratio of 3.29, significant at the .001 level, was obtained.

3. The experimental group exceeded the control group in mean rate of reading. The data yielded a t-ratio of 5.30, which was significant at the .001 level of confidence.

SUMMARY AND CONCLUSIONS. The analysis and interpretation of data obtained would seem to justify the following conclusions:

1. Phonics taught according to an independent method, Phonics Turnpike to Reading, produced greater gains in spelling achievement of second-grade pupils than did phonics taught according to the Scott, Foresman basal reader method.

2. Phonics taught according to an independent method produced greater gains in reading achievement of second-grade pupils than did phonics taught according to a basal reader method.

3. A highly significant difference between the experimental and control groups in rate of reading was effected by the experimental method of teaching phonics.

AN EVALUATIVE STUDY OF CATHOLIC PLEASURE READING BOOKS FOR RETARDED READERS OF THE INTERMEDIATE GRADES ON THE BASIS OF READABILITY AND CHILDREN'S INTEREST RESPONSES

Sister Julienne Marie Roth, S.N.D. de N.

PROBLEM. The purpose of this thesis was to make an evaluative study of Catholic books for children in the intermediate grades based on readability levels obtained through the use of standardized formulae and a study of the expressed reactions of children in the intermediate grades who were classified as retarded readers. The criterion for selection of the children was six months or more retardation in reading.

The project had a fourfold purpose:

1. To obtain a list of Catholic pleasure reading books for retarded readers of the intermediate grades through the participants' responses concerning difficulty and interest.

2. To evaluate these books objectively by the use of recognized measures - the Dale-Chall and the Spache formulae.

3. To gain knowledge of the influencing factors in children's book selection.

4. To learn whether the children of the older age bracket would accept books pleasing to the nine-year-olds.

PROCEDURE. The study conducted was a normative survey type utilizing analysis of children's actual responses to the books on the basis of interest and reading difficulty and objective rating of readability by means of formulae.

This study included 202 children. The large number of them was enrolled at parochial schools while a very small number attended a reading clinic. Practically all were of average or above average intelligence and were in the chronological age bracket of nine to fourteen with reading levels of second through easy fifth grade.

Seventy Catholic books intended by publishers for intermediate grade children were subjected to either the Dale-Chall or Spache formula for readability. Each book was circulated among approximately ten children of the 202 retarded readers in grades four, five, and six for their evaluation of reading difficulty and interest.

The responses of the children were tabulated and a comparison was made between publishers' ratings of readability, readability formulae, and children's rating of the book's difficulty and interest. The pupils' rating of "average difficulty" or "too difficult" was interpreted on the basis of each student's independent reading as established by the writer according to accepted standards for determining pupils' reading levels, e.g. if a pupil reading independently at second-grade level considered the book of average difficulty it was rated as satisfactory for those reading at this level.

FINDINGS. The study of the books objectively by formulae and subjectively by children's responses yielded the following information. First, publishers' ratings are too broad to be of specific help in book selection for retarded readers; secondly, the objective measures used to find the readability placed the books in the upper bracket of the range; thirdly, children will read above their tested level when lured by interest and curiosity; fourthly, format, size, and typegraphy are important factors in calculating the readability of books; and lastly, there is a dearth of Catholic books for retarded readers of this age level.

SUMMARY AND CONCLUSIONS. There is a need for Catholic books with varied reading levels for independent reading by children of the intermediate grades. Writers who enter this field will do well to give close attention to the format of their books as well as to typography, pictures, illustrations, style and content, for these are influencing factors in children's book selection. Since there seems to be a relationship between the amount of leisure reading done by retarded readers and the availability of easy and interesting reading materials, this finding points to the need for Catholic books of high interest and low difficulty.

Evidence collected during the study from the interest responses indicates that the use of easy and interesting materials with retarded readers may result in permanent improvement in attitudes toward reading, and, in particular, toward the reading of Catholic books. In the mind of the writer this change of attitude toward reading in general and toward Catholic reading in particular is the most important implication of the study and merits further study.

WORD STUDY OF READING WORKBOOKS FOR FIVE SERIES OF RECENTLY REVISED READERS FOR GRADES ONE THROUGH TWO

Sister Mary Denysia Sughrue, S.M.S.M.

PROBLEM. The purpose of the present study was to evaluate five series of workbooks to determine to what extent they provided re-enforcement of words introduced in their respective basic readers, thus aiding in the growth and development of word recognition. A comparison of the frequency of each word, the total number of running words, the rate of introduction of new words, and words common to the five series was made.

PROCEDURE. The selection of the five series of workbooks was determined by the companion dissertation of Sister Mary Victorine Kean. The four books in each series included one book containing the three preprimer workbooks, the primer, first, and second level workbooks.

1. Frequency of words. As each word was counted it was checked in the workbook to indicate its inclusion. Every word was recorded on graph paper when it initially appeared in a book. Subsequent repetitions were tallied.

2. Total running words. The total running words was the sum of the number of words on each page.

3. Rate of introduction of new words. This process was completed by dividing the total number of running words by the total number of new words introduced in each workbook. Although the three preprimers were included in one book they represented three levels and were therefore tallied and recorded as three separate books in each series.

4. Interlocking vocabularies. Words lists from Sister Mary Victorine's study were transferred to a master sheet together with their frequencies for each level and series. The same information pertaining to the respective workbooks was

then recorded directly above the total frequency of each word of the companion basic reader.

FINDINGS. A study of the various data with reference to the number of running words, rate of introduction of new words, number of repetitions and degree of overlapping vocabulary in the five series of reading workbooks resulted in the following summary:

1. A total of 2,468 words was introduced in the workbooks of the five series.
2. A total of 351 words was common to the five series of workbooks.
3. A total of 803 words was presented in the workbooks but did not appear in the basic readers.
4. Series A workbooks presented 138 words not included in the basal readers. Approximately 80 per cent of these words appeared only in Series A.
5. Series B workbooks presented 225 words not included in the basal readers. Approximately 72 per cent of these words appeared only in Series B.
6. Series C workbooks presented 435 words not included in the basal readers. Approximately 85 per cent of these words appeared only in Series C.
7. Series D workbooks presented 98 words not included in the basal readers. Approximately 64 per cent of these words appeared only in Series D.
8. Series E workbooks presented 12 words not included in the basal readers. Half of these words appeared only in Series E.
9. The total number of different words in the workbooks for the first preprimers of the five series was 68, of which only one word was common to all five series at the first preprimer level. The same result was noted in the basal readers.
10. The total number of different words in the workbooks for the second preprimers of the five series was 141, of which only seven words were common to all five series at the second preprimer level.
11. The total number of different words in the workbooks for the third preprimers of the five series was 195, of which only 27 words were common to all five series at the third preprimer level.

12. The total number of different words in the first reader workbooks was 1,134, of which approximately 14 per cent were common to the five series.

13. Nine per cent of the 2,468 different words appeared only in Series A, nine per cent appeared only in Series B, 18 per cent appeared only in Series C, eight per cent appeared only in Series D, and two per cent appeared only in Series E.

SUMMARY AND CONCLUSIONS. The present study has revealed data which seem to justify the following conclusions:

1. The number of new words introduced at the various levels in the different series indicates the need for greater conformity in the number of new words with which the primary grade child should be confronted at each level.

2. The number of repetitions of words in primary basal material has not been considered by authors of the series studied as evidenced by the range and average repetitions noted.

3. The small number of words common to the five series evaluated suggests that books in these series are of doubtful value as supplements to each other.

4. The number of words presented in the workbooks which were not introduced in the basal readers ranged from ten in Series E to 464 words in Series C. Series E used the workbook to re-enforce vocabulary presented in the reader; Series C provides enrichment through varied exercises, including a section completely devoted to phonics.

Since the vocabulary-building activities provided in workbooks correlated with basal readers are intended to increase the reading skills of the pupils, the teacher must be very selective in determining the series and co-basal series which will best fulfill this purpose. Attention should be given to the vocabulary load, vocabulary content, and vocabulary frequency of these materials, and to the degree to which workbooks and readers complement one another.

A DIAGNOSTIC SURVEY OF SPECIFIC READING DIFFICULTIES IN THE FOURTH AND FIFTH GRADES OF A MID-WEST PAROCHIAL SCHOOL

Sister Mary Bernard Vaca, C.S.J.

PROBLEM. The purpose of this study was to determine the specific types of reading difficulties and needs of the pupils in the fourth and fifth grades of a single school, and to suggest corrective measures designed to reduce the number of pupils requiring remedial treatment in reading.

PROCEDURE. The study included 79 fourth-grade pupils and 71 fifth-grade pupils. Each grade was divided into two classes. All the pupils who were enrolled in the grades under examination were included in the testing program.

Intelligence quotients were obtained from the Otis Quick-Scoring Mental Ability Tests, New Edition. An analysis was made of the intelligence quotients of the group as a whole, as two grade units, and as four class groups. The intelligence quotients were correlated with reading achievement.

Reading difficulties were analyzed from The Developmental Reading Tests, Form D-A. Measurements were obtained in the following areas: recognition of words in isolation, recognition of words in context, recognition of reversible words in context, locating elements, syllabication, locating root words, word elements, beginning sounds, rhyming sounds, letter sounds, and word synthesis. From results in these tests, specific types of reading difficulties were determined and suggestions for corrective measures were proposed.

FINDINGS. 1. An analysis of the intelligence quotients revealed that no child had an IQ of 130 or above; 13 had a superior rating, 115-129; 53 rated high average, 100-114; 66 showed a low average rating, 85-99; 18 rated inferior, 70-84; and none was classified as very inferior, below 70.

2. The comparison made of reading and intelligence disclosed a wide range of scores in each class. The correlations between these two variables ranged from .69 to -.11, the higher coefficients being found in the fourth grade.

3. An analysis of the entire group's performance revealed extreme scores of underdevelopment in Words in Context and Word Synthesis. Scores in Visual Analysis and Phonetic Knowledge were within average range. Pupils manifested proficiency in Syllabication.

4. The analysis of test performance for Grade Four, Group A showed highly developed analytical skills but lack of ability to synthesize.

5. The test results of Grade Four, Group B indicated consistent development of all skills tested. Most of the scores were found within one-half grade below and above the grade level of expected achievement at the time of testing.

6. The majority of scores for Grade Five, Group A, were more than one-half grade below the level of expected achievement. This indicates general underdevelopment of skills.

7. Whereas mean scores in analytical skills of Grade Five, Group B met or exceeded the level of expected achievement, the mean Word Synthesis score was only 4.0.

SUMMARY AND CONCLUSIONS. The conclusions based on the results of this study indicated a need for remedial work within each of the four classes analyzed. Since the same area of weakness was found in each group the suggested corrective measures were applicable to all.

1. Recognition Patterns. A meaningful basic sight vocabulary was considered as the primary requirement. In addition, word-recognition techniques meaningfully accompanying the identification of symbols was suggested. Intensive and continuous instruction was needed in discovering the meanings of strange words from context.

2. Visual Analysis. The skills of visual analysis were highly developed and scores indicated the ability to locate the most useful structural, visual, and phonetic elements in words.

3. Phonetic Knowledge. Extreme deficiency was not noted in these skills; however, greater abilities were exhibited in certain areas. A balance in the use of phonetic skills was advised.

4. Word Synthesis. The inability of synthesize words was clearly manifested. Intensive instruction and continuous drill was suggested for effective and rapid synthesis of the parts into the whole word. Methods that required strictly auditory blending were discouraged and emphasis on visual recognition and synthesis was advocated. Exercises in blending word parts were encouraged in contextual settings rather than in isolation.

The survey was limited to those areas subject to diagnosis in the Diagnostic Silent Reading Tests. From these results it was concluded that the children enrolled in the fourth and fifth grades of the school under study received phonetic knowledge chiefly in isolated drill and consequently were confronted with much difficulty in comprehension and rate of reading. Methods of this kind produced slow, laborious, and overanalytical readers.

LEVELS OF INTERPRETATION POSSIBLE FOR CHILDREN IN GRADE FIVE

Sister Louis Clare Werdmann, O.S.F.

PROBLEM. The primary purpose of this study was to investigate the depths of interpretation reached by children in grade five. Specifically, answers to these questions were sought: Is there a significant difference in the depths of interpretation attained by pupils with varying intelligence quotients? Do pupils of higher reading achievement levels necessarily interpret more deeply than those pupils reading at lower levels?

PROCEDURE. Questions based on stories from a supplementary fourth reader were constructed on four levels of interpretation: factual, main idea, inference, and interpretation. Responses to these questions were obtained from 70 fifth-grade pupils in two rural schools in southern Indiana. Pupils were ranked according to Lorge-Thorndike Nonverbal Intelligence Test IQ and according to average reading score on the Stanford Achievement Test. Groups were then formed. Group I was composed of 20 pupils with the highest intelligence quotients, Group II included the 20 lowest. Group III consisted of 20 pupils with the highest reading scores, and Group IV of the 20 lowest reading scores.

FINDINGS. Group I was significantly better than Group II in mean response to questions of all four levels: factual, main idea, inference, and interpretation. The differences were significant at the .001 level of confidence in all four comparisons.

Group III was significantly better than Group IV in mean response to questions of all four levels of interpretation. The differences were significant at the .001 level of confidence in all four comparisons.

SUMMARY AND CONCLUSIONS. The data for this study were gathered from the responses of fifth-grade children to informal questions at varying levels of interpretation. Groups were formed based upon the intelligence quotients and upon reading achievement. Analyses were made comparing these groups. The hypothesis that pupils having higher intelligence quotients interpret more deeply than those children with lower intelligence quotients was confirmed.

Since even greater differences were found between the groups divided on the basis of reading achievement than between intelligence groupings, it seems that as reading achievement progresses, the ability to interpret is strengthened. Teaching of reading skills does aid children in the important task of gaining more than mere literal interpretation of what is read. However, does depth of interpretation follow automatically as reading skills are taught or must the interpretation skills be taught more directly? If so, what are these skills? Further study is needed to answer these questions. The conclusion that depth of interpretation is dependent upon intelligence and reading achievement supports conclusions of previous research.

AN EXPERIMENTAL STUDY OF THE EFFECT OF INTENSIVE TRAINING IN SPECIFIC COMPREHENSION SKILLS UPON IMPROVEMENT OF GENERAL READING ACHIEVEMENT OF HIGH SCHOOL GRADUATES

Sister Mary Agnes Anne Wilcox, S.M.S.M.

PROBLEM. The present experimental study was undertaken to examine areas of reading achievement for the purpose of determining the extent to which a developmental reading program stressing certain basic comprehension skills would affect the reading comprehension, reading vocabulary, and total reading achievement of high-school graduates.

PROCEDURE. Prior to the beginning of the developmental reading program experiment, a testing program was inaugurated. In order to direct the reading program toward meeting individual differences in ability, the Kuhlmann-Anderson Mental Ability Test was administered. In addition, the California Reading Test, Advanced Form W, was given to determine initial scores in reading comprehension, reading vocabulary, and total reading achievement.

Materials used included Be a Better Reader, Reading for Meaning, and Standard Test Lessons in Reading. While the instructional program included work in a variety of reading skills, major emphasis was given to location of main ideas and to organizational skills.

Three groups were formed within the experimental group of 36 high-school girl graduates, according to initial reading achievement scores. The writer instructed them in selected basic comprehension skills for four half-hour periods weekly, for four months. At the end of the experimental period, the California Reading Test, Advanced Form X, was administered to appraise gains.

FINDINGS. To evaluate progress made in the various areas of reading achievement during the experimental period, the Pearson Product-Moment correlations were calculated between initial and final achievement scores. The t-test was applied to mean differences between initial and final grade scores in the three areas: comprehension, vocabulary, and total reading.

1. The mean difference between initial and final scores in reading comprehension was .94. A t-ratio of 8.54 was obtained, significant at the .001 level of confidence.

2. The mean difference between initial and final scores in reading vocabulary was .33. The resultant t-ratio of 1.06 was statistically insignificant.

3. The mean difference between initial and final scores in total reading was .65. A t-ratio of 6.50 was obtained, significant at the .001 level of confidence.

SUMMARY AND CONCLUSIONS. The analysis of data obtained during the present study warrants the following conclusions:

1. A developmental reading program offering instruction in certain basic comprehension skills did very significantly increase the total or average reading achievement of high-school graduates with statistical significance at the .001 level of confidence.

2. A developmental reading program offering instruction in certain basic comprehension skills did very greatly increase the reading comprehension skills of high-school graduates with statistical significance at the .001 level of confidence.

3. A developmental reading program offering instruction in certain basic comprehension skills did increase vocabulary growth of high-school graduates. However, this increase was not statistically significant.

4. Individualized instruction did contribute to significant increases in the reading growth of particular students.

Since the developmental reading program produced such great effect on growth in reading achievement during this experimental study with high-school graduates, it would be highly advisable to introduce developmental reading programs into college curricula. Proficiency in reading is vital for successful achievement in college and for successful living in general.

THE HISTORY AND DEVELOPMENT OF EDUCATIONAL FACILITIES FOR THE MENTALLY HANDICAPPED AS ESTABLISHED BY THE FELICIAN SISTERS OF THE BUFFALO PROVINCE

Sister Mary Sabinie Boczar, C.S.S.F.

PROBLEM. Given proper training the mentally handicapped can become an asset rather than a burden to the community or institution in which they live. This thesis has been written primarily to obtain a more comprehensive view of the particular contribution made by the Felician Sisters of the Buffalo Province in the general area of mental retardation through the establishment and development of the three institutions under their direction in the Diocese of Buffalo, New York.

PROCEDURE. The three institutions or schools for mentally deficient children which were studied are: St. Rita's Home in Getzville, New York, which accommodates 42 severely retarded patients aged from early infancy to six years, and eight trainable retardates between the ages of seven and twelve; the Immaculate Heart of Mary Home in Cheektowaga, New York, a residential school for dependent children which numbers among its 100 residents approximately 25 educable retardates; and Cantalician Center, a day school in Buffalo, New York, providing education for approximately 160 trainable and educable retardates. Much of the information regarding these facilities has been obtained as a result of the writer's experience with the mentally handicapped in the three institutions under study. Additional information was acquired through personal interviews with the Principals, Administrators, and Social Workers and likewise through a written inquiry sent to the Administrator of each institution. Records on files have also been studied.

FINDINGS. St. Rita's Home was established on February 6, 1942 upon the request of public and private authorities for the care of the most severely retarded children regardless of cultural background, creed, or race. The majority of the children are bedridden patients requiring constant physical care. The Home provides an environment conducive to good personality development and a program which emphasizes training in self-help as a preparation for later life within a family circle or another institution, if that should be necessary.

The Immaculate Heart of Mary Home began formal education of its mentally deficient dependent children in 1942 with the opening of three special classes. The curriculum is adapted to the child, his needs, and abilities. The "Course of Study for Use in Classes for Children with Retarded Mental Development," prepared by the Exceptional Children Division of the State University of New York College of Education in Buffalo, New York, is used. A well balanced program gives opportunity for healthful living. The Home offers opportunities for learning to live, work, and play with others. Great precaution and utmost care accompany every child's discharge in order to avoid loss of any of the academic achievement, social adaptation, and personality development acquired during the stay at the Home.

The Cantalician Center, an outgrowth of a Psychological and Child Clinic maintained by the Catholic School Department of the Diocese of Buffalo, opened in the fall of 1956 when legislation made public schooling for severely retarded children permissive, but usually unavailable. It is a non-sectarian school which admits children between the ages of six and sixteen, having an IQ of 70 or below. The only requirements are the ability to walk and to attend to personal needs. The children are grouped on the basis of chronological, social, and mental ages. Trainable retarded children constitute two-thirds of the entire enrollment. Although only a small percentage of this group may be able to achieve a limited degree of self-direction, it is hoped that a larger number will achieve a moderate degree of personal and social development and will become useful at least in their own homes. The educable group is given academic training similar to that of normal children but at a rate compatible to their mental development. In addition they are taught handicraft which should prepare them for useful occupation in later life. The school follows its own curriculum. Socialization is considered of paramount importance. In general, Cantalician Center attempts to provide the opportunity for all its pupils to grow physically, mentally, emotionally, and socially to their full capacity.

SUMMARY AND CONCLUSIONS. Since the care and training of the mentally handicapped became a public issue largely as a result of the establishment of these educational facilities in the community, there is less family stigma borne with retardation. The range of service provided by the three institutions covers the need of mentally retarded children of varying ages and varying degrees of mental deficiency. Because these three schools are located in close proximity within the Buffalo area, the special education needs of this particular locality are adequately met. Mentally retarded children from infancy to sixteen years of age have facilities for care and training whether they are severely, moderately, or mildly retarded. A program of vocational training for older children, which is being considered, will ideally complete the education of the retarded child who is capable of profiting from this specialized training.

INTERRELATIONSHIPS OF MENTAL AGE, READING CAPACITY, READING ACHIEVEMENT AND PERSONALITY DEVELOPMENT OF MENTALLY RETARDED CHILDREN

Sister Marie Concepta Branca, S.S.J.

PROBLEM. It was the purpose of this study to investigate the relationships existing between mental age, reading capacity, reading achievement, and personality of educable mentally retarded children.

The specific objective of the study was to determine, with reference to mental retardates, answers to the following questions:

1. Is there a significant correlation between mental age and reading capacity?

2. Is there a significant correlation between mental age and reading achievement?

3. Is there a significant correlation between personality and each of the other three factors - mental age, reading capacity and reading achievement?

4. Are response patterns of retarded children in a test situation constant and consistent?

PROCEDURE. Thirty educable retarded children were selected from the School of the Holy Childhood, a day school for retarded children in Rochester, New York. The chronological age range was 9-1 to 15-9 and the I.Q. range was 53 to 80. Scores were those obtained on the Stanford-Binet Intelligence Scale administered by a certified school psychologist. Mental ages ranged from 6-7 to 11-6.

Subjects were divided for testing according to achievement at the time of testing. Selectees were administered either the Primary or the Intermediate level of the Durrell-Sullivan

Reading Capacity Test, Form A. They were likewise given either the Primary I or Elementary level of the Metropolitan Achievement Test, Form B. The entire group received the adapted form of the SRA Junior Inventory.

At the end of a nine-month period, the above tests, with the exception of a different form of the Metropolitan Achievement, were re-administered for the purpose of appraising increments in achievement and of determining stability of measured capacity and of personality inventory responses. The initial testing took place in September, 1961 and the final testing in June, 1962.

Using the Pearson-Product Moment, correlations between the following factors were calculated: mental age and reading capacity; mental age and reading achievement; mental age and personality; reading capacity and reading achievement; reading capacity and personality; reading achievement and personality.

FINDINGS. Tabulation and analysis of the data accumulated established the following findings regarding the retardates under study:

1. Significant positive correlations exist between mental age and reading capacity, mental age and achievement, reading capacity and achievement.

2. No significant correlation exists between personality and reading achievement.

3. Measured capacity level is consistently superior both to measured mental age and to reading achievement.

4. Personality ratings show consistently stable patterns over a period of months.

5. Greatest instability in personality ratings is indicated in those areas where social variables exert most pressure - relations with others and school.

6. Certain irregularities showing decrease rather than increase in measured capacity over achievement in the nine-month period of the study are not comprehensible because of the limited scope of this study.

SUMMARY AND CONCLUSIONS. Analysis of data from the tests administered and observation of the subjects in the testing situation prompted the following conclusions:

1. Responses of retarded children in a testing situation are normal and consistent with their limited potential.

2. Mental age, while not a completely reliable indicator of probable achievement, is superior to capacity level as a prognostic instrument.

3. Variation between mental age and achievement decreases as chronological age increases.

4. Retarded children comprehend spoken language at a much higher level than written language.

5. Retardation does not imply personality maladjustment. Most personality problems of retardates are mediated by social variables, i.e. parental pressure, peer status, et cetera.

6. Improvement in reading achievement would not improve personality ratings unless intervening variables change.

AN EXPERIMENTAL STUDY TO DETERMINE THE VALUE OF SUPPLEMENTARY READING MATERIAL IN THE PROMOTION OF INTEREST IN READING AND PROGRESS IN READING ABILITY WITH EDUCABLE MENTALLY RETARDED CHILDREN

Sister Thomas Mary Cavanaugh, C.R.S.M.

PROBLEM. The present study was undertaken to determine the relative importance of the factor of motivation in the promotion of reading ability among educable retarded adolescents. The means of motivation under evaluation was the daily newspaper structured to daily class procedure. An effort was made to determine the effect of the daily newspaper on the retardate's reading achievement as well as on his feelings concerning his own reading ability.

It was postulated that, because of the chronological age of the group under consideration, the daily newspaper would most closely relate an individual to the reading habits of the various members of his own family. Through the medium of experimental design this study probed the importance of this consideration.

PROCEDURE. The experiment took place at St. Barbara Day School, Philadelphia, Pennsylvania. Two groups each consisting of 15 educable retardates, were subjects. The experimental period was November, 1961 to April, 1962.

Prior to experimentation both of these groups were equated according to chronological age, mental age, vocabulary level, reading grade placement, intelligence quotient, and self-evaluated reading interest and ability. The testing instruments employed were the Stanford Binet Intelligence Test, Form L-M, the Peabody Picture Vocabulary Test, the California Reading Test, Upper Primary, and an interest test, constructed by the writer. The differences found in the initial scores of the groups were all proven to be less than that required for a statistically significant mean difference at the .05 level of confidence.

Both groups received the same amount of reading instruction from similarly qualified teachers. One hour daily, in two separate periods, was devoted to reading. The control group used basic reading materials during both periods. The experimental group used basic reading material during one period and the daily newspaper during the other period.

FINDINGS. The results of this investigation are presented in three areas: hearing vocabulary, reading achievement, and self-evaluation of reading interest and ability. Statistical evaluation of these three areas answered the specific purpose for which this study was undertaken.

1. Correlations indicated that while the groups were comparable in hearing vocabulary at the beginning of the experiment, changes had occurred within each group during the course of the experiment. Change was greatest for the experimental group.

2. The experimental group significantly exceeded the control group in mean reading achievement at the close of the experiment.

3. Both groups manifested heightened interest in reading at the conclusion of the experiment. An evaluation of the results of the two interest tests supports a previously accepted theory concerning the retarded child's inability to express himself fully or adequately in response to simple thought questions.

SUMMARY AND CONCLUSIONS. The present study has attempted an evaluation of the effect of motivation on the reading achievement of educable mentally retarded adolescents. It was hoped through its results to determine the importance of this factor in the intellectual, scholastic, and social spheres of an individual.

Analysis of the data showed that the two groups progressed both academically and in verbal intelligence as measured by hearing vocabulary; the difference in each instance favored the experimental group, indicating that the experimental variable,

namely, the daily newspaper as a motivational device in the teaching of classroom reading to educable adolescent retardates, may have been the causative agent.

In conclusion, it would appear that a program of instruction which supplements basic reading materials with the daily newspaper produced greater improvement in reading achievement than a program utilizing basic reading materials only.

A SURVEY OF THE STATUS OF READING ACHIEVEMENT OF SEVERELY MENTALLY RETARDED CHILDREN

Sister M. Joseph Andre De Mers, S.S.J.

PROBLEM. The author of this dissertation, as administrator of a school serving both educable and trainable retardates, was keenly interested in structuring the best possible type of program to answer the needs of each group.

Since educators are divided in their opinion as to whether training or formal education should be the keynote to the program for those individuals whose I.Q.'s are below 50, the author was particularly concerned with the extent to which academic subjects should be implemented in a program for the severely mentally handicapped children in her school.

The core of an academic program is reading. Therefore, it was to this subject that the author directed specific, intensive research for the opinions of leading experts familiar with the problem of mental retardation and attempted to determine the effectiveness of some already existing formal reading programs for severely mentally retarded children by means of questionnaire and personal interviews with the administrators and teachers who had implemented the programs.

PROCEDURE. The author administered standardized tests in both oral and silent reading to 100 children whose chronological ages ranged from 11 to 18 inclusive, whose mental ages ranged from 4-6 to 7-6, and whose I.Q.'s according to the results from either a Stanford-Binet or WISC, were 50 or below. These subjects were chosen from schools in six archdioceses and dioceses in widely separated geographical areas of the United States.

The oral reading test was from the Durrell Analysis of Reading Difficulty; the silent reading was from the Metropolitan Achievement, Primary I, Form B. These were individually administered, and were chosen because of ease of administration, the short selections, and the fact that a grade level could readily be obtained.

The results of the two reading tests were checked and rechecked before recording on individual pupil data sheets. These sheets were then distributed to the teachers of those pupils participating in the study, with a request to record such information as the length of time each child had been enrolled in an academic program, family data, and the results of any reading tests administered previous to the time of the survey.

Personal interviews with many of the administrators and teachers participating in these academic programs for severely retarded gave varied and valuable insights into their personal experiences and views on the education of the trainable child. A detailed questionnaire prepared by the author was answered and returned by twenty-six of these educators.

After the program of testing and interviews was completed, the author organized, analyzed, and interpreted the data obtained in the survey in an effort to determine to what extent the formal reading programs now functioning for severely mentally handicapped children have been successful.

FINDINGS. 1. Test Results. Metropolitan Achievement, Primary I, Form B (Reading) Grade levels ranged from 1.5 to 3.9+. The mean was 2.1; the median grade was 2.0. Forty-five (45%) of the total tested ranged from 1.5 to 1.9; twelve (12%) of the total number comprehended third grade material. One of the twelve scored 3.9+ which was the ceiling of the Primary form of the Metropolitan Test.

Forty-seven of the subjects had mental ages below 6-6 at the time of testing. Because educators are of the belief that individuals with mental ages less than 6-6 cannot learn to read, the achievement of these subjects is given special mention. Twenty-nine of the 47 scored between 1.5 and 1.9 in reading; 17 scored at second grade level, and one reached the third grade level of achievement.

The grade levels achieved in the Durrell Analysis of Reading Difficulty ranged from below first grade to, and including, fifth grade. Only one individual read at the latter level. Twenty-two or approximately one-fourth of the total number, failed to read first grade material. Fifty-one subjects read at first grade level or below. Thirty-two read second grade material and thirteen read at third grade level. The remaining three read orally at fourth grade level.

The highest grade level of achievement in reading attained by the forty-seven pupils with mental ages below 6-6 was third grade. Sixty subjects showed poor comprehension at their level of oral reading ability. Twenty-two or nearly one-fourth of the total number obtained a good rating at their achievement level; the remaining eighteen rated fair at their level of oral reading.

2. Pupil Data Sheet. The chronological age range is from 11-0 to 18-8 inclusive. The mean C.A. is 15. The mental age range is from 4-6 to 7-6. The mean M.A. is 6-4. The I.Q. range is 30-50. The mean I.Q. is 45.

Six years is both the mean and median in number of years the subjects spent in an academic program. Thirty-six pupils who spent at least five years in academic work achieved a reading level of at least 2.0 on the Metropolitan test. Nineteen pupils with less than five years in academic work achieved a reading level of at least 2.0 on the Metropolitan test.

An analysis of the total test results indicated that the socio-economic environment and home conditons of the subjects in this particular study did not appear to influence their achievement.

No prior reading tests were indicated for 31 subjects. With the remaining subjects, it was impossible to make general comparisons as to the progression or regression in the reading achievement as a group, because of the variety of reading tests given and the time element involved.

3. Questionnaire. Some salient data gathered from this instrument include:

1. Reading programs in the survey are conducted along similar lines. However, wide variations are to be found in the length of school day, maximum number in class, and amount of emphasis placed on reading.

2. All teachers disregard the conventional methods of developing reading readiness.

3. Greater use is made of teacher-made rather than commercial materials in teaching reading to severely retarded children. However, all schools use basic texts.

4. Reading instruction is highly individualized as ability grouping is difficult.

5. Time allotted for daily formal reading varied from twenty minutes to two and one-half hours. The majority of teachers indicated that at least one hour was spent each day in teaching formal reading.

6. There was unanimous agreement that results of the educational programs in operation warrant their continuance and that reading achievement, even though minimal, has a strong effect on the child's self-concept.

7. Twenty-two of the twenty-six educators answering the questionnaire stated that they believed every trainable child should be given a trial in a formal academic program.

The following are excerpts from statements made during interviews:

1. Formal academic progress helps to made the handicapped child less different from the average child.

2. A child's self-concept is improved by academic activities adapted to his level of achievement, encouraging honest effort and at least minimal progress.

3. The value of achieving reading, however minimal that achievement may be, lies not in its practicality in a work-a-day world, but in its effect on the intangible world of spirit and personality. There is in us all a fundamental need for "sameness." In our elementary school set-up at least, this "sameness" to peers is largely equated to the ability to read and write. In order to strengthen the self-concept of the severely mentally handicapped and to improve their image in the eyes of parents and neighbors, minimal reading achievement becomes important. If this can be brought about by consistent, kindly effort, then surely as human persons in a democracy, severely mentally retarded children have a right to the effort.

SUMMARY AND CONCLUSIONS. Within the limitations of this survey the following conclusions appear valid from an analysis of the four factors comprising this study:

1. Both the results of the two standardized tests and the response to the questionnaires submitted to administrators and teachers of the classes studied indicate that a formal reading program may validly be included in a program for severely mentally retarded children.

2. It was determined that the severely mentally handicapped can achieve within a limited range, the upper level being about 3.8 according to the tests administered.

3. The levels of achievement and the difference in the results on standardized oral and silent reading tests have definite implications for structuring a reading program for severely mentally retarded pupils. In order to preclude the problems of tension resulting from frustration, reading materials for independent reading and classroom presentation should be kept within the limits of comprehension.

4. Materials used for oral reading particularly should be kept below the frustration level. Since there is a dearth of commercial materials with interest levels suitable for older severely retarded pupils, teacher-constructed materials should be supplied in abundance.

5. Both tests administered (Metropolitan and Durrell), having been standardized for normal school population, seem to penalize the retarded. Twenty subjects in the survey failed to complete the Metropolitan test even though evidence of further ability was present.

6. The results of the tests and the assessment of ability by the teachers interviewed indicate a level of reading achievement sufficient to give a measure of satisfaction to these individuals.

7. Assessment of the functioning of pupils having long-term placement in academic programs indicates a steady increase in word recognition after comprehension growth ceases.

8. However limited or minimal the reading success achieved by these severely mentally handicapped children, its value in terms of social and psychological adjustment is clearly indicated.

A SURVEY OF THE POST-SCHOOL ADJUSTMENT OF 50 MENTALLY RETARDED CHILDREN WHO HAVE PARTICIPATED IN THE ST. LOUIS ARCHDIOCESAN SPECIAL EDUCATION PROGRAM

Sister Helen Mary Gieb, S.S.N.D.

PROBLEM. The effectiveness of any special education program can best be judged by the degree of mental and social adaptability of the children it has trained, when these children become adults. Because the Department of Special Education in the Archdiocese of St. Louis had been in operation for a period of ten years, the writer was prompted to take advantage of this opportune time to measure the effectiveness of the program.

The purpose of this study was, therefore, to investigate the adjustment of retardates who were trained and educated in the special education program of the Archdiocese of St. Louis, in respect to the home, community, economics, and religion.

PROCEDURE. The 50 subjects selected for this study represented the total number of students who had been in the program of special education for a minimum of five years and who were now living in the community. The median age of the group was 20-0 and the mean IQ was 53.7.

The technique of investigation used was that of personal interview with the parents of the retarded subjects. A questionnaire consisting of approximately 80 items distributed among the four areas of adjustment was used as a basis for the interview. Parents represented diversified socio-economic brackets with the majority in the middle-class.

FINDINGS. Responses given to items referring to the home adjustment indicated that 56% of the group made a favorable adjustment, 27% fair, and 17% a poor adjustment. The study revealed a 48% positive adjustment, 25% moderate, and 27% poor adjustment in the community. Fifty per cent of the subjects were gainfully employed while the other 50% remained in their homes. In the area of religion, 66% of the group made a favorable adjustment, 13% an adequate one, and 21% a poor adjustment.

SUMMARY AND CONCLUSIONS. The favorable adjustment indicated the positive influence of the parents and the school as possible contributing factors for adjustment of the subjects capable of profiting from this influence. The reasons for the poor adjustment in the various areas could be due to a lack of interest and understanding of the child by the family or insufficient guidance and education by the school, or it might be attributed to the limited ability and personality of the individual subject. It can most probably be attributed to a combination in varying degrees of all these factors.

On the basis of this study, it appeared that the mentally retarded can make a satisfactory adjustment in life with limitations. Since adjustment and behavior are developmental, beginning in early childhood, the training and education given by the school is an important contributing factor. Parental cooperation and guidance are also contributing factors in this adjustment.

The school curriculum and methodology have been effective in the training of these individuals, and should continue to project their influence.

FUNCTIONAL ANALYSIS OF THE PATTERNS IN READING DIFFICULTIES OF THIRTY MENTALLY RETARDED CHILDREN

Sister M. Seraphine Herbst, S.S.J.

PROBLEM. This study was initiated to determine specific patterns of reading functioning of mental retardates. Patterns were determined through analysis of data compiled from responses to a series of standardized tests and from information given by teachers on an oral reading check list. Thirty educable children (I.Q.'s 53-80), students in a private school in Rochester, New York, were the subjects of the study.

The specific purposes of this dissertation were:

1. To determine general patterns of functioning of mental retardates:
    a) correlation between mental age and reading capacity
    b) correlation between mental age and reading achievement.
    c) correlation between reading capacity and reading achievement

2. To determine specific patterns of functioning of retardates:
    a) areas of greatest competency and weakness on standardized achievement tests
    b) areas of greatest competency and weakness as indicated by teachers of subjects of study

PROCEDURE. Thirty pupils with chronological ages ranging from 9-0 to 15-7, the majority of whom had been from six to seven years in a formal reading program, were selected from the School of the Holy Childhood, a private day school for trainable and educable retardates, of Rochester, New York. All had I.Q.'s in the 50 to 80 range, determined by the school psychologist using the Stanford-Binet scale.

The subjects were given the Metropolitan Achievement Test, the Durrell-Sullivan Reading Capacity Test, and the California Achievement Test. An oral reading check list for each subject compiled by the author of this study was completed by the teachers of the subjects. The author of the study also interviewed each teacher. All tests were administered in September, 1961.

FINDINGS. 1. Achievement ratings on the Metropolitan Achievement Test and the California Achievement Test were consistently higher than mental age expectancy as obtained from the Stanford-Binet scale.

2. Results of the Durrell-Sullivan Reading Capacity Test were consistently higher than either mental age or achievement grades.

3. Qualitative increment in reading functioning continues after quantitative increment ceases.

4. Retardates are capable of greater achievement in those reading tasks which require use of basic word skills than in those tasks requiring comprehension and reasoning skills.

5. The greatest competency of the retardates tested was in the area of vocabulary skills.

6. In manipulation of words, retardates find difficulty in determining opposites.

7. Retardates are limited in their ability to solve problems involving reasoning. They are unable to make inferences, organize topics, or recognize sequence of events.

8. Retardates evidence common difficulties in oral reading. Among the most serious of these difficulties are omission of word endings, substitutions and inability to combine sounds.

SUMMARY AND CONCLUSIONS. From the conclusions drawn from this study certain educational procedures are indicated.

1. In structuring a reading program for retardates, arbitrary achievement limits should not be set using M.A. or I.Q. as an indicator of ultimate achievement.

2. Methods used in instructing mental retardates in reading should capitalize on the strengths of retardates in order to mitigate as far as possible their weaknesses.

3. Diagnosis of specific areas of weakness on subtests of standardized tests will indicate the type of teacher-constructed and commercial materials needed for purposeful instruction.

4. Reading instruction should be continued after the child has reached his maximum achievement level since evidence indicates that horizontal growth continues.

5. Care should be taken to make retardates familiar with as many life-reading situations as possible to insure maximum functioning in these situations.

A COMPARATIVE STUDY BETWEEN NORMAL CHILDREN AND MENTALLY RETARDED CHILDREN IN THE FIELD OF ART EDUCATION

Sister M. Ann Catherine Kozachyn, O.S.F.

PROBLEM. In an effort to find the most effective means of developing the potentials possessed by mentally handicapped children, attention has been directed to creative art as another avenue of expression for this type of handicapped child. Since the creative approach to expression is a comparatively new area in teaching mentally handicapped children, its effectiveness has not been definitely established. To assess the value of this type of approach, a study was conceived by which the reactions of mentally retarded children were compared with those of normal children with the same mental ages.

The purpose of this study was to compare, with an optimum of objectivity, the creative art work of mentally retarded children with the creative efforts of normal children with matched mental ages.

PROCEDURE. To select the population for this study, mentally handicapped children attending St. Coletta School, Jefferson, Wisconsin, were tested with the Peabody Picture Vocabulary Test to determine their mental age. The children selected were assigned to one of three levels: Primary - mental ages 5-8 to 7-2; Intermediate - mental ages 7-2 to 9-6; Advanced - mental ages 9-6 to 12-0. Retardates comprised the experimental groups. Using the same test, children at St. John the Baptist Parochial School, Jefferson, Wisconsin, were selected on the criterion that each of their mental ages matched that of one of the children in the experimental groups. They were assigned to their particular levels and comprised the control groups. Each group consisted of 16 individuals. The total population for the experiments was 96 children: 48 in the three experimental groups and 48 in the three control groups.

The following table illustrates the differences in intelligence quotients and chronological ages between the experimental groups and the control groups.

Table 1

MEANS OF CHRONOLOGICAL AGES, INTELLIGENCE QUOTIENTS, AND MENTAL AGES OF EXPERIMENTAL AND CONTROL GROUPS ON THREE LEVELS

Levels	Mean M.A.	Experimental groups		Control groups	
		Mean C.A.	Mean I.Q.	Mean C.A.	Mean I.Q.
Primary	6-1	12-3	60.31	6-1	102.50
Intermediate	8-0	13-3	68.81	7-1	110.68
Advanced	10-2	14-6	77.95	8-9	112.37

Before the actual experimentation took place, two check lists were constructed to gauge group and individual responses. These check lists were based on the average responses to be expected at certain ages. A numerical rating system was used to indicate the response received during the experiments. Check lists were marked during and after each experiment. The author conducted all the experiments and ratings in an attempt to maintain a uniform procedure.

Starting on the Primary level, the author directed an art class with the control group. The class was then conducted with the experimental group using the same subject matter, materials and motivation. Six experiments were conducted on this level. The same procedure was repeated on the next two levels.

FINDINGS. There seemed to be a consistent pattern of higher achievement in the control groups on all levels. The experimental groups tended to work on a low average level. Children in the experimental groups were quick to respond and eager to work but the duration of their interest and their initiative were very brief. They quickly tired of the projects and were easily satisfied with their achievements regardless of the quality of their work. The control groups displayed normal development in the sequence of their abilities. Individuals in the experimental groups were somewhat immature in some of their concepts. Children in the control groups were less egocentric than the children in the experimental groups. Some individuals in the experimental groups had difficulty in relating to others socially. In both groups, children who manifested signs of emotional difficulties tended to perform at a much lower and more immature level.

In the older groups of retardates, there were a few observations that seemed to be rather significant. Mongoloid children tended to perform on a very immature level. There appeared to be a similarity in their style of work despite the fact that they had come from different classrooms and their mental ages had a wide scatter. Older children with brain damage developed definitely stylized patterns in their work, especially in their concept of the human figure. Although the mentally handicapped children were older chronologically than the children in the control groups, the experimental groups failed to equal the quality and maturity of the control groups in their creative art work. This fact would seem to indicate that the greater physical maturity and the prolonged experience of the mentally handicapped children did not have any significant effect on the outcome of the experiments.

On the whole, the control groups were more ready and able to express themselves than the experimental groups. The mentally handicapped children required more stimulation and concrete ideas. The control groups were much more conscious of color and details and were more inclined to be exacting in their methods of expression.

SUMMARY AND CONCLUSIONS. After comparing and evaluating the work of normal children and mentally handicapped children, the following conclusions seemed justifiable:

1. Using the same materials, subject matter, and having the same motivation in creative art work, mentally retarded children perform on a low average level as compared to normal children.

2. The sequential development of artistic representations of mentally retarded children follows a normal pattern in most cases but the development occurs at a slower rate.

3. In contrast to the regular programs given to normal and superior children, mentally handicapped children require a much more enriched teaching approach with emphasis on concreteness, motivation, and repetition.

4. Mentally retarded children tend to lack initiative in experimentation and in solving problems. They are easily satisfied with their products and need a great deal of encouragement to improve upon their work.

5. On all levels, mongoloid children tend to have similar patterns in their art work. These are characterized by repetition of symbols and by a stylized and immature concept of the human figure.

6. Brain-damaged children displayed a highly personal and stylized pattern in their work. These patterns were so unique that the schema could be easily identified as belonging to a certain individual.

7. Children who manifested signs of emotional instability were unable to respond adequately to the experiments. They had great difficulty in expressing themselves.

8. Children with mental retardation failed to reach the social competence attained by those in the control group with similar mental ages. The handicapped children tended to be more egocentric.

9. Mental age does not denote the same degree of personal development or extent of abilities found in persons with similar mental ages but differing chronological ages.

10. Mentally retarded children find it difficult to utilize or transfer past experiences and learning in order they they may more readily grasp a new situtation.

A STUDY AND EVALUATION OF SOME SCHOOLS FOR MENTALLY RETARDED CHILDREN IN JAPAN

Kimiko Nobuhiro

PROBLEM. This study was undertaken to survey the status of the education of retarded children as it existed in Japan as of May 1, 1962. The purpose of this dissertation was to study schools for mentally retarded children including considerations such as types of schools, financial resources, the scope of the program, vocational training and its involvements, personnel engaged in the education of children, and parent-school relations.

PROCEDURE. In March 1962 the writer contacted the Ministry of Education in Tokyo, Japan, to secure a listing of names and addresses of schools for mentally retarded children presently in operation. The writer constructed a comprehensive questionnaire intended to survey basic facilities available within these schools. The questionnaire was constructed and replied to in Japanese, and translated into English by the writer.

In June 1962, upon the receipt of a listing of 32 schools, this questionnaire was sent to 30 schools for mentally retarded children and for handicapped children which provide educational programs for mentally retarded children as well. Two newly established schools were eliminated from this study because of uncertainty of addresses. Between July, 1962 and February, 1963 21 of the 30 schools responded to the questionnaire. In accordance with the official custom of the Ministry of Education in Japan, the information recorded on the questionnaire was dated as of May 1, 1962.

FINDINGS. The day school system is predominant for mentally retarded children though many schools feel the necessity for residential facilities. Some day schools offer limited residential accommodations. More than 50% of the schools were not initially established as schools for mentally retarded children. About the same percentage of schools was established in or since 1960.

The majority of schools are publicly financed, with a few private schools being supported by tuition. Figures indicate a predominance of male students with most schools functioning at less than their capacity enrollment. Chronological ages for admission to various schools range from 5 to 20 years. The minimum IQ for admission varies from 20 to 50. In the main, multiple-handicapped children are not accepted in these schools. Physical and psychological evaluation are pre-requisite.

Children are classified according to intellectual, academic and chronological levels. Most children are offered vocational education and training. Placement and follow-up is the ultimate responsibility of the schools in those instances where parents are not able to fulfill this role. Generally boys are most successful in finding and holding jobs with 74.82% of the boys and 67.51% of girls being presently employed.

At present most schools are adequately staffed with teachers meeting requirements set forth by the Ministry of Education. The sixteen responding principals have taught normal children from 15 to 36 years. Male teachers (60.35%) predominate over female teachers (39.65%) engaged in special education with more male teachers holding degrees.

Parents attend monthly PTA or Mother's meetings which provide demonstration lessons and parent-teacher conferences. Other instructional activities are also made available to parents.

Curriculum development is currently receiving the needed attention of educators professionally trained in special education. One school among twenty provides for a religious program which is Buddhism.

Most schools offer a brief summer camping program. In some instances summer vacation is fully utilized for on-the-job training of students.

Future plans for increased enrollment and facility expansion are undergoing serious study at present. Research and study projects are engaged in by more than 50% of surveyed schools.

SUMMARY AND CONCLUSIONS. On the basis of this survey, the following conclusions may be drawn:

1. At the present stage of development the Ministry of Education governs and regulates educational programs. A continuation of this policy would stifle professional initiative. With development of education of mentally retarded children, the Ministry of Education might well reduce its degree of authority and assist the promotion of varied and active educational programs.

2. Cooperation of professional personnel in addition to teachers would be encouraged by the financial and legislative assistance of the government.

3. Emphasis on vocational education and training ought to be re-examined in view of the child's potential and in harmony with his rights as a human being.

4. It would be well to promote the improvement of teacher-training programs.

AN EXPERIMENT IN MOTIVATION OF NORMAL AND RETARDED READERS AND ITS EFFECT ON READING PROGRESS

Sister Marie Jeannine O'Brien, R.S.M.

PROBLEM. The purpose of this study was to determine the comparative progress in reading made by normal children who are retarded readers and by mentally retarded children through a highly motivated reading program.

The study resulted from the interest of the writer in improving the reading of fifth grade pupils of normal intelligence through the use of motivating techniques. As thoughts and plans for this study evolved, interest in the mentally retarded and his reading progress increased. This experiment was undertaken to determine if similar motivating aids would stimulate improvement for both groups.

PROCEDURE. Thirty children of normal intelligence were selected and divided into two comparable groups. The experimental group was taught by the writer while the control group was taught by a teacher of similar experience and background.

The experimental and control groups of mentally retarded children were composed of 13 and 14 subjects respectively. All the children attended private day schools and were of a similar socio-economic background. The chronological age of the normal children ranged from 8-11 to 11-2 with a mean age of 10-4. The Otis Quick Scoring Mental Ability Test showed a range of intelligence quotients from 90 to 124 with a mean mental age of 105.90. The total reading capacity grade scores ranged from 5.0 to 7.8 with a mean grade score of 6.43 while the initial reading achievement grade scores ranged from 4.2 to 7.1.

The chronological age of the retarded sample ranged from 10-5 to 14-6 with a mean age of 11-9. The Stanford-Binet Intelligence Scale showed a range of intelligence quotients from 56 to 83 with a mean of 72.95. The total reading capacity grade score ranged from 2.70 to 8.10, with a mean grade score of 5.30; and the initial reading grade scores were from 1.90 to 7.20, with a mean grade score of 3.47. To ascertain the normality of distribution, the application of Chi-Square was made to the intelligence quotient scores of both the normal population and the retarded population and in neither case was there a significant difference from the normal curve.

In order to determine the value of a highly motivated reading program the writer made use of the following techniques during the period of work on three consecutive units of the Betts Reading Series:

1. Unit theme and bulletin boards - Each unit was introduced by a bulletin board display depicting the theme of the unit. The unit theme was correlated with all other subjects and the bulletin board became a focal point for the attention and interest of the class. Another beneficial use of the bulletin board was the posting of pictures beside the printed word. The children's original illustration of stories or poems was also exhibited to maintain interest.

2. Progress charts - A strong motivating force for learning is the child's desire to excel over a previous record. To inspire the child to greater efforts for improvement the author used individual progress charts. Vocabulary growth and comprehension of each unit was tabulated on this chart.

3. Dramatization of familiar stories was employed to improve oral reading, comprehension, and social competency.

4. Tape recorder - Improvement of oral reading was sought by recording the individual's audience reading. This proved to be an incentive to greater effort.

5. Library period - The children were made aware of the enrichment to be had in visiting the library and were made conversant with library procedure by means of a weekly visit during which they selected a book of their choice at their instructional level.

FINDINGS. At the termination of the five months' experimental period alternate forms of the Metropolitan Achievement Tests were administered and the following results were tabulated.

1. Normal sample - The experimental group's mean gain was 1.24. The resulting t-ratio of 7.294 was significant at the .001 level of confidence. The mean gain from initial to final testing of the control group was 1.07. A t-value of 5.35 was obtained, which was significant at the .01 level of confidence.

2. Mentally retarded sample - The experimental group's mean gain was .31. The resultant t-ratio, 1.348, was statistically insignificant. The mean gain from initial to final testing of the control group was .36. A t-value of 1.385 was obtained, which was statistically insignificant.

SUMMARY AND CONCLUSIONS. Results of this study seem to justify the following conclusions:

1. The use of a cluster of devices and techniques to form a highly motivated reading instructional program did benefit appreciably the progress in reading achievement of the experimental group of the normal population. However, this did not prove true of the experimental group of the retarded population.

2. It can be stated on the basis of teacher observation and appraisal that each child of the experimental group of the normal population became more socially competent and emotionally more mature. Similarly, reports of teacher observation indicate that an improvement socially and emotionally was discernible for the retarded population.

3. It is believed by the author that the academic results of the experiment in regard to the mentally retarded population are contingent upon the factor that both the experimental and control groups were taught by the same teacher. Hence it would appear that the results reported relative to the mentally retarded population were not sufficient to form just criteria of the value of this program.

A COMPARATIVE STUDY OF TEACHER RESPONSES CONCERNING THE ADJUSTMENT OF EDUCABLE RETARDED CHILDREN IN A DAY SCHOOL OR IN A RESIDENTIAL SETTING

Sister M Alrose Roessler, C.S.A.

PROBLEM. One of the major goals of education is to help the individual to realize his potentialities. This objective is of particular importance to the retarded child since it provides for development beyond the academic skills in which he cannot achieve normally. However, the question of where and under what conditions the child is more receptive to training will always exist, due to the variations in child and environment.

This research was focused on one aspect of the preparation of the educable retardate for life - that of the social approach. It attempted to obtain an indication of the personal and social adjustment of children at home in comparison with that of children living in a residential setting, using a random sample of children attending special classes.

The major goals of this study were to contrast various aspects associated with the education and care of educable retarded children in residential and community schools and to compare the development which takes place in retardates attending residential and special classes.

PROCEDURE. A random sample was selected consisting of 45 educable retardates living at St. Coletta Residential School, Jefferson, Wisconsin and 45 educable retardates attending Christ Child Day School, St. Paul, Minnesota. Pupils with I.Q.'s beyond the 45-80 range were excluded.

Data were obtained through a survey of related literature and questionnaires sent to the teachers at St. Coletta and Christ Child Schools. The purpose of the questionnaire was to ascertain the personal and social development of the subjects. The teachers answering the questions indicated whether individual children were always, sometimes or never adjusted in specific areas. Responses to the questionnaires were tabulated according to sex, age, I.Q., and number of years spent in normal classes. Further interpretations were made by comparing the responses given by each school to the individual questions and to the complete questionnaire of twenty items.

FINDINGS. Analysis of the responses to the questionnaire indicated that in general children living at home and attending day classes were better adjusted than those living in a residential school.

It was found that in both groups more boys than girls made a poor adjustment. In the residential group a larger percentage of the well-adjusted had I.Q.'s below 63, while the greater percentage of day class pupils with a good adjustment had I.Q.'s above 63. In both the residential and community groups a larger percentage of adolescents rated a good adjustment than a poor one. The percentage of children who did not attend classes in a regular school was greater in the groups representing a good adjustment. Fifty percent or more of the groups with a poor adjustment had attended regular classes for a period of from one to four years.

SUMMARY AND CONCLUSIONS. The findings of this study warranted the following conclusions:

1. Interpretation of the total response to the questionnaires indicated that educable retarded children living at home and attending day class tended to be better adjusted, personally and socially, than those in residential schools.

2. Analysis of specific items in the questionnaire revealed that although day class pupils were better adjusted, those attending residential school were not maladjusted.

3. Both residential and day class groups reported that 1) girls, 2) adolescents, and 3) retardates who had never attended normal classes were better adjusted than 1) boys, 2) preadolescents, and 3) those who had spent some time in normal classes.

4. In the residential group a larger percentage of the well-adjusted had I.Q.'s between 45 and 62 while the greater percentage of day class pupils with a good adjustment had I.Q.'s between 63 and 80.

5. The choice between home and residential school for the educable retardate is partly influenced by the potential social development of the child within these environments.

A COMPARATIVE STUDY OF FOUR STANDARDIZED TESTS WITH THE INFORMAL READING INVENTORY ADMINISTERED TO MENTALLY HANDICAPPED CHILDREN

Sister Mary Vincent Strittmatter, O.S.U.

PROBLEM. It was the purpose of this study to ascertain the value of standardized reading tests in approximating the instructional reading level of the child who is mentally retarded. The study compared results of each of four standardized reading tests with the actual reading levels obtained through the use of an informal reading inventory.

PROCEDURE. Twenty-three subjects who were members of five different classes in one school for mentally handicapped children were selected according to the following criteria: attendance in a special class for mentally handicapped children, intelligence quotient of 80 or below on the Stanford-Binet, and ability to read at a third- to fifth-grade level.

The California Reading Test Form W, the Gates Reading Survey Form 3, and Stanford Reading Achievement Test Form J, and the Reading (Pronunciation) Test in the Wide Range Achievement Test were given to the pupils. The instructional, independent, and frustrational reading levels were determined by means of an informal reading inventory given to each subject.

A comparison of each of the four standardized reading tests with the reading levels established by the informal reading inventory was made for the group as a whole and for each of the three reading level groups.

FINDINGS. 1. Analysis of the entire group. Average deviations of the standardized reading tests from the instructional level determined by the informal reading test vary from less than one month in the case of the Stanford Reading Achievement Test to more than one year in the case of the Wide Range Achievement Test.

The means of the standardized tests do not coincide with the means of the frustration level as determined by the inventory, but the Wide Range Achievement Test most closely approximates this level. The group achieved higher scores on the Wide Range Achievement Test than on the tests which included comprehension.

2. Third-grade reading group. The Gates Reading Survey Test most closely approximated the instructional level of these children. The California Reading Test and the Wide Range Achievement Test most closely approximated the frustration level found for the pupils in the group.

3. Fourth-grade reading group. The mean of the Wide Range Achievement Test was higher than the mean of the informal reading inventory. The means of the standardized tests were higher than the means of the informal reading inventory. The Wide Range Achievement Test results approximated the frustration level established by the informal inventory.

4. Fifth- and sixth-grade reading level group. Levels from the informal inventory were higher than standardized tests scores in many of the comparisons. Better readers seem to sustain interest on the inventory. The means of the Gates Reading Survey and the California Reading Achievement closely approximated the comprehension level found in the inventory, a fact which is to be expected since both of these tests measure comprehension and word recognition. The scores of the standardized tests were higher than those of the inventory on the independent reading level only.

SUMMARY AND CONCLUSIONS. No definite criteria can be established on the basis of the findings of this study concerning the comparison of the three reading levels for determining the instructional or independent levels. The reading achievement scores of individual pupils vary greatly on different standardized reading tests. The following conclusions seem justified, however:

1. Variations in standardized test scores of individual pupils give evidence that the use of standardized test scores alone to group children for reading is inadequate. The use of the informal reading inventory is necessary for the evaluation of progress at least twice a year.

2. Plans for an effective reading program should provide a choice of reading material within the learner's background of experience together with an estimate of each pupil's comprehension level and oral reading level.

3. Special effort needs to be made by the teacher to stress word recognition skills in context settings, emphasizing an understanding of their meaning. It is evident from this study that as the retarded child progresses in reading his ability to comprehend and to conceptualize lagged behind his ability to recognize words. He is able to understand and pronounce individual words in a sentence without being able to grasp the general idea of the total sentence.

4. The teacher of the mentally handicapped needs to provide numerous opportunities to develop vivid understandings and meaningful concepts of reading materials in order to insure growth in the comprehension skills.

5. A wide range of abilities exists within each reading group. Slow learners will need more refined grouping than the child with average intelligence who is able to "stretch" more easily than the child with a mental handicap.

6. Measuring instruments to determine the various reading levels of the individual child should be carefully chosen. The limitations of each should be recognized and supplemented by the teacher's own evaluation.

7. Careful consideration should be given to the suitability of reading tests for mentally retarded children. A complete evaluation of the child's reading ability needs to include both the comprehension and mechanics factors of reading.

AN EVALUATION OF SPECIAL PROVISIONS IN EDUCATING THE MENTALLY HANDICAPPED CHILDREN IN THE AREA OF RELIGION

Sister M Hilda Sucher, S.C.C.

PROBLEM. There is a dearth of materials to bring the truth of religion to the retarded in a meaningful way. The purpose of this study was to evaluate materials specifically designed to teach religious truths to the retarded.

PROCEDURE. Materials designed for teaching religion to mentally handicapped persons were gathered from various centers made known by the National Association of Retarded Children, Inc. These materials were then evaluated according to the learning characteristics of the retarded.

Criteria used for evaluating the suitableness of materials designed for the religious education of the mentally handicapped were:

1. Colorful pictures.

2. Simple, familiar, abundantly illustrated text appropriate for age group.

FINDINGS. Except for materials drawn up by individuals for specific programs, there are a dozen materials of the Catholic faith, two of the Protestant and one of the Jewish designed to teach the retarded.

SUMMARY AND CONCLUSIONS. These materials are meager indeed, and evaluating them in the light of what is needed to reach the mentally handicapped, some of the necessary criteria are found to be lacking in order to make them meaningful to these individuals. At the primary level there is adequate material for the young chronologically but there is no suitable material for the older retardate who is being introduced to religion a little later than the normal individual. For further growth in religious truths beyond the primary level, material is sorely lacking.

One vital need is for appropriately illustrated religion books which would present in a meaningful way to the retarded at the intermediate and advanced levels a more comprehensive knowledge of our faith. Workbooks should also be constructed that would enforce these truths. Films, filmstrips, and books, other than texts used in class, which would illustrate truths strikingly and systematically should be devised.

THE DEVELOPMENT OF ST. COLETTA SCHOOL FOR EXCEPTIONAL CHILDREN, JEFFERSON, WISCONSIN, 1950–1962, INCLUSIVE

Sister Mary Floriana Weninger, O.S. F.

PROBLEM. The purpose of this historical survey was to present a comprehensive study of the growth and development of the St. Coletta School for Exceptional Children, Jefferson, Wisconsin, from the years 1950 to 1962 inclusive. The physical facilities, the administration, the personnel, the types and number of children enrolled, and the daily program were studied.

PROCEDURE. Information for this historical survey had been gathered mainly from primary sources since the writer has been associated with the school since 1952 as a teacher and part-time group mother. Personal interviews with other personnel of the school, examination of the school files, the school publication, St. Coletta Homelights, the local weekly and daily newspapers, the files of the Sisters of St. Francis of Assisi Convent, St. Coletta brochures and catalogs, and the book The Challenge of the Retarded Child, by Sister Mary Theodore, O.S.F., yielded valuable information. Data on past history were obtained from the files of the St. Francis of Assisi Convent in Milwaukee, Wisconsin; from an unpublished thesis by Sister Mary Johnice Flanagan, O.S.F., The Development of St. Coletta School for Exceptional Children (1904-1950); from A Chapter of Franciscan History by Sister Mary Mileta Ludwig, F.S.P.A., and from A New Assisi by Sister Mary Eunice Hanousek, O.S.F.

FINDINGS. Findings of this study are summarized according to the categories: physical facilities, administration, personnel, enrollment, and program.

1. Extensive remodeling, renovating, and modernizing have been done in all the buildings, and several were enlarged. Three new buildings were erected.

2. The Mother General and five Sisters of St. Francis of Assisi form the Board of Directors. The superintendent of the School is assisted by a supervising teacher, a supervising group mother, a farm manager and a director of maintenance. The chaplain and two assistant chaplains direct all the religious activities of the school.

3. The three chaplains, 105 Sisters of St. Francis of Assisi, and 13 lay persons are on the staff. Staff positions such as groupmothers, teachers, nurses, and occupational leaders are usually held by Sisters. Faculty members benefit by in-service training and special courses offered at various colleges or universities. St. Coletta is the Laboratory School for the Cardinal Stritch College, Milwaukee, and participates in the graduate program leading to a Master's degree for Teachers of the Mentally Handicapped, and also in an undergraduate program leading to certification for groupmothers who work with retarded children. Through these training programs, school publications, and staff participation in public programs, the school extends its influence by community service.

4. The 518 children, adolescents, and adult retardates enrolled represent 35 states, the District of Columbia, Canada, Mexico, and Columbia, S.A. Admission age is from 6 to 15 years. There is no terminal age limit after a child has been admitted. Some retardates return to their homes after reaching their potential, some are transferred to other schools or institutions, and few vacancies occur through illness or death. Parents are encouraged to give their retarded son or daughter the opportunity for community adjustment after training is completed.

5. Sixteen cottages or departments are located on the main campus and on adjoining property. Younger children are enrolled in the school program, while occupational training is offered for adolescent and adult retardates. Both groups follow essentially the same program in the religion, social, and health areas. Extra-curricular activities are included for both the educational and vocational groups.

SUMMARY AND CONCLUSIONS. An historical survey was presented to study the growth and development of the St. Coletta School for Exceptional Children, Jefferson, Wisconsin, from the years 1950 to 1962 inclusive. The extent of the physical facilities, the administration, the personnel, the types and number of the children enrolled, and the daily program in the departments, school, and in vocational training were described.

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